UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

THOMAS BIONDOLILLO, Individually and on behalf of all others similarly situated, Plaintiff, v. ROCHE HOLDING AG, SEVERIN SCHWAN, ALAN HIPPE, DANIEL O'DAY and GOTTLIEB A. KELLER Defendants.	Case No. 17-cv-04056-AET-DEA **SECOND AMENDED CLASS ACTION COMPLAINT FOR VIOLATION OF THE FEDERAL SECURITIES LAWS** **JURY TRIAL DEMANDED**

Lead Plaintiff Kevin Gardeck and named Plaintiff Thomas Biondolillo ("Plaintiffs"), by and through their attorneys, allege the following upon information and belief, except as to those allegations concerning Plaintiffs, which are alleged upon personal knowledge. Plaintiffs' information and belief is based upon, among other things, their counsel's investigation, which includes without limitation: (a) review and analysis of regulatory filings made by Roche Holdings AG ("Roche") on the SIX Swiss Exchange ("SIX") (b) review and analysis of press releases and media reports issued by and disseminated by Roche; (c) review of other publicly available information concerning Roche; and (d) discussions with an FDA regulatory and drug development expert familiar with the relevant facts

herein. Plaintiffs believe that substantial evidentiary support will exist for the allegations set forth herein after a reasonable opportunity for discovery.

NATURE OF THE ACTION

1. This is a federal securities class action on behalf of a class consisting of all persons and entities, other than Defendants, who purchased or otherwise acquired the publicly traded securities of Roche from March 2, 2017 through June 5, 2017, inclusive (the "Class Period"). Plaintiffs seek to recover compensable damages caused by Defendants' violations of the federal securities laws and to pursue remedies under Sections 10(b), 20(a), and 20A of the Securities Exchange Act of 1934 (the "Exchange Act").

2. Roche is the largest biotechnology company in the world and a market leader in manufacturing and selling drugs used to treat cancer. Cancer drugs have netted Roche billions of dollars.

3. Roche's second highest revenue generating drug is called Herceptin. Herceptin is used to treat a type of breast cancer called HER2 positive breast cancer. Revenues from Herceptin in 2017 were an astounding $7.12 billion. However, Roche and its top management, as well as investors, knew that Herceptin would not continue to be such a massive money-maker for Roche for much longer. Herceptin's patent was set to expire, ushering in the way for competitors to supply a cheaper but nearly identical generic version of the drug to patients.

4. To offset the loss of revenues from copycat versions of Herceptin, called "biosimilars," Roche developed a strategy that consisted of both trying to increase revenues from newer drugs that would not be coming off patent anytime soon, and bundling sales of older drugs like Herceptin (whose patents were expiring) with newer drugs, selling the combination at a discount to patients who would save money buying the two drugs together (as opposed to buying the newer drug from Roche and the older drug in copycat form from a Roche competitor).

5. To that end, Roche devised the APHINITY III Study ("APHINITY," the "APHINITY study" or the "APHINITY trial)." The APHINITY study was a Phase III trial which tested whether the use of one of Roche's newer drugs, called Perjeta, in combination with the standard treatment after surgery for patients with HER2-positive breast cancer- Herceptin and chemotherapy- was more effective than just treatment with Herceptin and chemotherapy alone.

6. While Perjeta had been approved by the FDA since 2012 its use was limited as it was only used as a breast cancer drug before surgery. Revenues for Perjeta did not come close to revenues for Herceptin. But if the APHINITY study showed that adding Perjeta to the current regimen *after* surgery (known as adjuvant treatment) significantly decreased the risk of cancer returning, then not only could Roche offset revenues lost from biosimilar competition by increasing revenues

derived from Perjeta, it could continue to maintain revenues from Herceptin by selling a Perjeta/Herceptin bundle to consumers at a discount.

7. Roche and its executives were aware that because the standard after-surgery treatment of breast cancer with Herceptin and chemotherapy was so effective (it essentially cured early breast cancer in four out of five patients) doctors would need to see strong results showing significant improvement in the rate of cancer recurrence to prompt them to prescribe Perjeta in addition to the current treatment of Herceptin and chemotherapy alone. Indeed, the addition of Perjeta would increase the treatment cost for each patient by $6,100 per month. If addition of the drug did not offer substantial benefits then insurance companies would not cover its cost.

8. Roche and its executives were likewise well aware that the clinicians would weigh the benefits of adding Perjeta against the risks posed by any side effects or increases in the rates of complications and adverse events.

9. The anticipated result of the APHINITY study was the sole focus for Roche investors, as well as the Company, leading up to and during the Class Period. As one analyst stated, investors were "nearly paralyzed" pending the study read-out.

10. On March 2, 2017 Roche issued a press release (the "March 2 press release") announcing positive results from the APHINITY study, telling the market

that patients in the study who were given Perjeta lived longer without their cancer returning than patients who were not given Perjeta. The press release further stated that "no new safety signals were identified," quelling any fears that Perjeta increased the rate of adverse events.

11. Analysts and investors reacted to this news with vigorous enthusiasm. Analysts upgraded Roche and discussed how this excellent result removed a major overhang for Roche's stock by protecting its multibillion dollar breast cancer franchise against biosimilar competition. Indeed, shares of Roche saw the largest one day price increase in eight years.

12. The full results of the APHINITY study would not be presented for another three months, at the annual conference for the American Society of Clinical Oncology ("ASCO"), at which point the full study results would be published. Roche insisted that presentation of the full results of the APHINITY study would have to await the June ASCO conference, but assured the market that the results were "terrific," that the data from the study was "clinically meaningful" and that the APHINITY Study demonstrated that the addition of Perjeta had broad applicability and would improve the "standard of care" "systematically."

13. Beginning one day after issuing the March 2 press release, Roche's highest executives, the Individual Defendants and members of Roche's Corporate Executive Committee, began selling shares of Roche on the Swiss Stock Exchange

(the "SIX"). Over the next three months these insiders sold a total of over $13.1 million in Roche securities.

14. About three weeks after Roche executives completed their insider stock sales the ASCO conference took place and the full results of the APHINITY study were published.

15. On June 5, 2017, Roche revealed to the market the true results and data from the APHINITY study. The study results demonstrated that the addition of Perjeta after surgery showed less than a 1% benefit, barely passed the test of statistical significance, was not clinically meaningful, caused higher rates of diarrhea, and potentially increased serious cardiac toxic effects. Roche and the Individual Defendants knew this all along – particularly at the time they made their insider sales of stock. They had all of the data from the APHINITY study as well as a statistical analysis of the study results at the time they issued the March 2 press release.

16. On this news shares of Roche fell by $1.76 per share or approximately $5.12%, damaging investors and wiping out the prior gains from the March 2 press release which misleadingly touted positive results from the APHINITY study.

17. The reaction by analysts and clinicians to the APHINITY study results was harsh. Analysts cut their forecasts and price targets on Roche. Analysts commented that the marginal efficacy, safety risks, and massive costs of adding

Perjeta meant that the APHINITY study was essentially a failure and would not help insulate Roche's breast cancer franchise against biosimilar competition.

18. Oncologists- the individuals who were the ultimate decision-makers when it came time to prescribing medications- were blunt in their remarks concerning the APHINITY study results and the addition of Perjeta. One oncologist in attendance at ASCO stated "the toxic effects (and cost) are too great for too many to benefit too few." Another oncologist noted that treating 100 patients with Perjeta on top of the standard therapy would cost $10 million, stating "the study will never demonstrate a survival advantage" and concluding that "it would be irresponsible to add these to our standard regimens…" Yet another oncologist stated "[Perjeta] has not improved overall survival at all, nor has it reduced distant relapses to a statistically significant extent… the argument for recommending adjuvant pertuzumab [Perjeta] are weak, and those for investing the huge resources demanded to pay for it are even weaker…"

19. Defendants' statements about the "terrific" study results were false and misleading and caused Roche stock to jump up and trade at artificially high prices during the Class Period. After Defendants sold their Roche stock, pocketing over $13 million, Roche disclosed the truth: that the Perjeta study results were dismal. On this news, Roche shares declined substantially causing damage to Roche investors.

20. After the close of the Class Period one of the APHINITY trial's clinical investigators, Dr. Jose Baselga, resigned from his prestigious position as Chief Medical Officer at Memorial Sloan Kettering Cancer Center after the New York Times published an expose revealing that Roche had paid Baselga over $3 million in consulting fees and for a stake of the company it acquired, a fact which Baselga (and Roche) failed to disclose.[1] ASCO stated that it would conduct an internal review of Baselga's disclosures, which violated the financial disclosure rules set by the American Association for Cancer Research. Additionally, Baselga was an Executive Member of the Breast International Group ("BIG") which Roche identified in the March 2 Press Release as one of the study collaborators "working independently from the pharmaceutical industry." While Roche noted BIG's independence, it omitted to disclose that Roche had made millions of dollars in payments to one of its Executive Members (Baselga). Baselga was one of the only Oncologists who issued positive remarks concerning the APHINITY Study at the June 5 ASCO conference.

JURISDICTION AND VENUE

21. The claims asserted herein arise under and pursuant to §§10(b) and 20(a) of the Exchange Act (15 U.S.C. §§78j(b) and §78t(a)) and Rule 10b-5 promulgated thereunder by the SEC (17 C.F.R. §240.10b-5).

[1] Jose Baselga owned an equity stake in a start-up company called Seragon Pharmaceuticals. In August 2014, Roche's Genentech unit acquired Seragon.

22. This Court has jurisdiction over the subject matter of this action under 28 U.S.C. §1331 and §27 of the Exchange Act.

23. Venue is proper in this District pursuant to §27 of the Exchange Act (15 U.S.C. §78aa) and 28 U.S.C. §1391(b) as the Company conducts business and a significant portion of the Defendants' actions, and the subsequent damages, took place within this District.

24. In connection with the acts, conduct and other wrongs alleged in this Complaint, Defendants, directly or indirectly, used the means and instrumentalities of interstate commerce, including but not limited to, the United States mail, interstate telephone communications and the facilities of the national securities exchange.

PARTIES

25. Lead Plaintiff Kevin Gardeck purchased Roche securities at artificially inflated prices during the Class Period and has been damaged thereby. His PSLRA certification was previously filed with this Court (Dkt. No. 7-2) and is incorporated by reference.

26. Plaintiff Thomas Biondolillo purchased Roche securities at artificially inflated prices during the Class Period and has been damaged thereby. His PSLRA certification was previously filed with this Court (Dkt. No. 1) and is incorporated by reference.

27. Defendant Roche is a Switzerland corporation with its principal executive offices located at Konzern Hauptsitz Grenzacherstrasse 124, CH-4070 Basel, Schweiz. Roche operates in the pharmaceuticals and diagnostics businesses worldwide. The Company's subsidiary, Roche Molecular Systems Inc., maintains offices at Building 500, 1080 U.S. Highway 202, Branchburg, NJ 08876. Roche's two primary divisions are the Pharmaceuticals Division and the Diagnostics Division. During the Class Period, the Company's ADS was actively traded on the OTCQX Marketplace under the ticker symbol "RHHBY."

28. Defendant Severin Schwan ("Schwan") has been Chief Executive Officer ("CEO") of Roche since March 2008. Schwan is also a member of Roche's 6-person Corporate Executive Committee. Schwan had personal knowledge of the results of the APHINITY III Trial and the data from the APHINITY III Trial at the time of the March 2, 2017 press release.

29. Defendant Dr. Alan Hippe ("Hippe") has been the Chief Financial & IT Officer at Roche since April 2011. Hippe is also a member of Roche's Corporate Executive Committee. Hippe had personal knowledge of the results of the APHINITY III Trial and had the data from the APHINITY III Trial at the time of the March 2, 2017 press release.

30. Defendant Daniel O'Day ("O'Day") has been the CEO of Roche Pharmaceuticals since 2012. O'Day is also a member of Roche's Corporate

Executive Committee. O'Day had personal knowledge of the results of the APHINITY III Trial and had the data from the APHINITY III Trial at the time of the March 2, 2017 press release.

31. Defendant Gottlieb A. Keller ("Keller") has been Roche's General Counsel since 2008 and worked at Roche's corporate law department since 1984. Keller is also a member of Roche's Corporate Executive Committee. Keller had personal knowledge of the results of the APHINITY III Trial and had the data from the APHINITY III Trial at the time of the March 2, 2017 press release.

32. Non-defendant Roland Diggelmann ("Diggelmann") has been the CEO of Roche Diagnostics since 2012. Digglemann is also a member of Roche's Corporate Executive Committee. Diggelmann had personal knowledge of the results of the APHINITY III Trial and had the data from the APHINITY III Trial at the time of the March 2, 2017 press release.

33. Non-defendant Cristina A. Wilbur ("Wilbur") has been Roche's Head of Group Human Resources since March 2016. Wilbur is also a member of Roche's Corporate Executive Committee. Wilbur served as Head of Human Resources for Roche Diagnostics from 2010 to March 2016. Wilbur had personal knowledge of the results of the APHINITY III Trial and had the data from the APHINITY III Trial at the time of the March 2, 2017 press release

34. According to Roche's annual report, the Group's Corporate Executive Committee (CEC) is considered to be the Group's Chief Operating Decision Maker.

35. The members of Roche's Corporate Executive Committee during the Class Period were Defendants Schwan, Hippe, O'Day and Keller and Non-defendants Diggelmann and Wilbur.

36. Defendants Schwan, Hippe, O'Day and Keller are collectively the "Individual Defendants."

37. Each of the Individual Defendants:

(a) directly participated in the management of the Company;

(b) was directly involved in the day-to-day operations of the Company at the highest levels;

(c) was privy to confidential proprietary information concerning the Company and its business and operations;

(d) was directly or indirectly involved in drafting, producing, reviewing and/or disseminating the false and misleading statements and information alleged herein;

(e) was directly or indirectly involved in the oversight or implementation of the Company's internal controls;

(f) was aware of or recklessly disregarded the fact that the false and misleading statements were being issued concerning the Company; and/or

(g) approved or ratified these statements in violation of the federal securities laws.

38. The Company is liable for the acts of the Individual Defendants and its employees under the doctrine of *respondeat superior* and common law principles of agency because all of the wrongful acts complained of herein were carried out within the scope of their employment.

39. The scienter of the Individual Defendants and other employees and agents of the Company is similarly imputed to the Company under *respondeat superior* and agency principles.

40. The Company and the Individual Defendants are referred to herein, collectively, as the "Defendants."

ALLEGATIONS OF MISCONDUCT

Background

41. Roche is the world's largest biotechnology company and considers itself the global leader in cancer treatments, manufacturing numerous medicines for breast, skin, colon, ovarian, lung and numerous other cancers. Business for

Roche's oncology (cancer) business accounts for more than 50% of Roche's valuation. In 2009 Genentech became a wholly owned subsidiary of Roche.

42. Sales of Roche's top three pharmaceutical products (all oncology drugs) accounted for approximately 40% of Roche's total sales prior to and during the Class Period. In 2017 Roche's top grossing product was MabThera/Rituxan, with total sales of $7.5 billion, followed closely by Herceptin, with total sales of $7.12 billion, followed by Avastin with total sales of $6.79 billion. In 2017 Roche posted total sales of $54.1 billion. Roche also invests about $10 billion in research and development each year.

43. Herceptin (trastuzumab) is a drug used to treat HER2-positive breast cancer. HER2-positive breast cancer is a particularly aggressive type of breast cancer.

44. HER2-positive breast cancer is characterized by the presence of a specific protein (receptor) called the Human Epidermal Growth Factor Receptor 2 (HER2). The HER2 protein is present on the surface of healthy cells and plays an important role in their natural life cycle. However, excessive amounts of HER2, due to a gene mutation, can lead to uncontrolled cell growth and the development of cancer.

45. Approximately one in five women diagnosed with breast cancer will have HER2-positive disease. HER2-positive disease is associated with faster

disease progression and poorer chances of survival than HER2-negative disease. Globally, approximately 334,000 women are diagnosed with this type of breast cancer every year.

46. Since it was introduced in 1998, Herceptin has transformed treatment for women with HER2-positive early breast cancer, essentially curing more than four out of five patients when used with chemotherapy after surgery. Herceptin has been hailed for its efficacy in treating HER2-positive breast cancer.

47. Herceptin was Roche's first targeted cancer drug and it has dominated the HER2-positive market since its inception, with market share of over 90%.

48. Adjuvant treatment refers to treatment given to patients with early breast cancer after surgery with the aim of completely clearing any remaining cancer cells from the body and reducing the chances of the cancer returning.

49. Neoadjuvant treatment refers to treatment given to some patients with early breast cancer before surgery with the aim of shrinking the tumor, enabling an easier surgical procedure and a potentially better outcome. Neoadjuvant treatment and surgery are followed by adjuvant therapy to wipe out the remaining cancer cells in the hopes of preventing the disease from returning.

50. Three quarters of Roche's sales of Herceptin are derived from its use in adjuvant treatment, the balance is neoadjuvant or "pre-surgery".

51. Roche's Genentech unit spent decades and billions of dollars developing the blockbuster drug Herceptin. However, Herceptin's position of market domination for treatment of HER2-positive breast cancer is under threat from biosimilar competition. A biosimilar is a pharmaceutical drug designed to have active properties similar to ones that have been previously licensed. In order to lower healthcare costs through competition and increase access to lifesaving medications Congress created an abbreviated licensure pathway for biological products that are demonstrated to be biosimilar or interchangeable with an FDA-approved biological product, through the Biologics Price Competition and Innovation Act of 2009 (BCPI Act).

52. The patent on Herceptin in the EU was lost in 2014 and is due to expire in the U.S. in 2019. Patent protection of Roche's other two top drugs is likewise set to expire in the next 1-2 years. As cheaper biosimilars enter the market more patients will switch to buying those drugs given that they are just as effective as Roche's more expensive drugs, causing Roche to lose billions of dollars in revenues.

53. Roche has tried to stop biosimilar competition of Herceptin. For example, in 2014 Roche sued a South Korean pharmaceutical firm for patent infringement in connection with the company's biosimilar of Herceptin, which had been approved in 2014. Roche lost the suit, but was successful in forestalling sales

of the drug for three years, until the case was settled. In April 2017 India's antitrust regulator opened an investigation into whether Roche used its dominant position to maintain a monopoly over Herceptin after a complaint was filed by Biocon and Mylan who sell biosimilars of Herceptin in over a dozen countries alleging that Roche wrote to doctors, hospitals and regulators in an effort to mislead them about the safety and efficacy of biosimilars.

54. On December 1, 2017 the FDA approved the first biosimilar to Herceptin called Ogivri, manufactured by pharmaceutical company Mylan N.V.

55. Roche's huge impending sales decline from biosimilar competition loomed large and was widely discussed by analysts and investors leading up to and during the Class Period.

56. Roche developed a strategy to contend with biosimilar competition: conducting drug trials that not only expand the market for the drugs tested but protect older drugs, like Herceptin, that are coming off patent. An April 27, 2017 Bloomberg article titled "Roche CEO Faces Patent Cliff With Confidence Thanks to New Drugs" stated that "Roche Holding AG is counting on new medicines- not keeping old standbys alive – as the world's biggest maker of cancer drugs faces a critical transition year." In an April 27, 2017 interview with Defendant Schwan he downplayed the threat of biosimilar competition by focusing on "innovative medicines" stating, "So yes, we will see impact from biosimilars but at the end of

the day we are able to move the standard of care and replenish more mature products with our innovative medicines." Schwan made it clear in the interview though that this would require new treatments to be accepted by doctors on a broad basis, stating "[t]he answer is not that you defend your old franchises. The answer is that you move the standard of care."

57. As FiercePharma, a popular pharmaceutical industry website, stated in a February 13, 2017 article, "it's no secret that Roche's breast cancer juggernaut is about to hit a snag, and pharma watchers well know that the Swiss drugmaker has been lining up new drugs and data to steer onto a new course. The endeavor is crucial: ***The mighty Herceptin is due for U.S. biosimilar competition in the next few years, and it's a 6.8 billion Swiss franc contributor to the company's top line. Biosims in Europe are expected to erode sales beginning this year***." (Emphasis added).

58. Schwan's solution to "move the standard of care" would not be an easy task. The National Cancer Institute defines "standard of care" as "treatment that is accepted by medical experts as a proper treatment for a certain type of disease and that is widely used by healthcare professionals. Also called best practice, standard medical care, and standard therapy." https://www.cancer.gov/publications/dictionaries/cancer-terms/def/standard-of-

care. Therefore, by definition, if a new treatment is considered the "standard of care" it means that the treatment is accepted and widely used.

59. Schwan's statement that the answer is to "move the standard of care" meant that Roche intended that the Herceptin/Perjeta combination become the new, accepted and widely used treatment for HER2-positive early breast cancer in the entire applicable patient population. This would require study data strong enough to persuade oncologists to move patients from Herceptin to the combination treatment using Herceptin and Perjeta.

60. Defendants understood the risks that Roche faced given looming biosimilar competition. Defendants also knew that to offset revenues lost due to biosimilar competition, the APHINITY study would have to demonstrate broad applicability of the Herceptin/Perjeta combination in adjuvant use over the entire cross section of patients with HER2-positive early breast cancer, not just in one small subgroup of those patients.

61. The APHINITY Phase III Study ("APHINITY," the "APHINITY study" or the "APHINITY trial") was Roche's most hotly anticipated patient trial. The APHINITY III study would test a novel combination therapy, designed to protect Herceptin against the inevitable biosimilar competition. As with all Phase III trials the purpose of the APHINITY trial was to determine efficacy and monitor adverse reactions.

62. Perjeta (pertuzumab) is one of Roche's relatively newer breast cancer medications, approved by the FDA in 2012. Perjeta is approved for use with Herceptin, alongside chemotherapy, to treat metastatic and early-stage breast cancer ***before surgery***, i.e. in the ***neoadjuvant*** setting. Perjeta is not nearly as lucrative for Roche as Herceptin, generating $1.9 billion in sales in 2016. Efforts to expand the use of Perjeta also failed in a key breast cancer trial in 2014. In that trial Perjeta was combined with another Roche medication, Kadcycla, but failed to beat Herceptin and chemotherapy at progression-free survival.

63. While Perjeta (combined with Herceptin and chemotherapy) benefits patients with less advanced HER2-positive breast cancer when used ***before surgery***, expanding the market and meaningfully increasing revenues for Perjeta would require demonstrating that it was beneficial in more advanced disease, ***after surgery***, i.e. in an ***adjuvant*** setting.

64. If Roche could show that Perjeta, which would be protected by a Roche patent against competition for at least another 15 years, provided a clinically significant benefit when administered after surgery, not only would an increase in revenues from Perjeta offset revenue losses from Herceptin biosimilar competition, the sales life of Herceptin would also be extended, protecting billions in Roche revenue. Because Perjeta would only be used in combination with Herceptin, Roche would be able to offer a Herceptin-Perjeta bundle at a discount to a

combination of Perjeta and a biosimilar competitor. As Bloomberg analyst Max Nisen noted: "Several of [Roche's] drug trials don't just expand the market for drugs tested. They protect older Roche medicines…Some analysts expect Perjeta, which generated close to $2 billion in sales in 2016 in its existing indications, to peak at more than $5 billion in annual sales. That's no chump change. But another sneaky benefit might be Perjeta's ability to extend the sales life of its breast-cancer-fighting-partner. Roche expects a Herceptin biosimilar to hit the U.S. market this year…Roche will likely be able to offer a Herceptin-Perjeta bundle at a discount to a combination of Perjeta and a biosimilar competitor.[2]"

65. To that end, the APHINITY study was designed to test whether the addition of Perjeta to chemotherapy and Herceptin after surgery (adjuvant treatment) improves patient outcomes.

66. The APHINITY study was conducted in 4,805 patients with HER2-positive breast cancer after receiving surgery. Half of the study patients received one year of Herceptin, chemotherapy and Perjeta. The other half of the study patients received one year of Herceptin, chemotherapy and placebo. The median follow-up[3] for patients in the study was 45 months. The clinical cutoff date for the

[2] *Bloomberg*, Max Nisen, March 2, 2017.

[3] The median follow-up refers to the time between a specified event and the time when data outcomes are gathered. The median follow-up is an indicator of how mature survival data is (e.g. how many months on average the patients were followed since randomization into the study).

study was December 19, 2016, meaning that all of the results and data were finalized and collected as of that date. Dr. Jose Baselga, then Chief Medical Officer of Memorial Sloan Kettering Hospital, was one of the study collaborators and is listed as a study author in the New England Journal of Medicine publication of the APHINITY study.

67. Roche sponsored the APHINITY Study, which was an international study performed in collaboration with Frontier Science Foundation and the Breast International Group ("BIG"). BIG is described in Roche's March 2 Press Release as a "not-for-profit organization for academic breast cancer research groups from around the world" which "facilitates breast cancer research at an international level, by stimulating cooperation between its members and other academic networks, and collaborating with, but working independently from, the pharmaceutical industry." At the time, Baselga was an executive member of BIG.

68. Full results from the APHINITY study were to be received and reviewed by Roche in March of 2017. However, the full results from the trial would not be disclosed to the public until June, 2017. In June 2017 the full results from the APHINITY study would be presented publicly at the largest and most important event for clinical oncologists, pharmaceutical companies manufacturing oncology treatments (including Roche), and industry investors and analysts: the

2017 Annual ASCO Meeting[4] scheduled to take place from June 2-6, 2017 in Chicago.

Anticipation of the APHINITY Study Results

69. Leading up to and during the Class Period, the market anxiously anticipated the results from the APHINITY study. Indeed, the results from the APHINITY study were viewed by analysts and investors as being more important than even Roche's quarterly revenues and current performance. The day before the release of Roche's fourth quarter 2016 earnings, a Bloomberg analyst stated "Solid 2016 earnings may matter less than the APHINITY drug trial results, due in 1Q."

70. According to Jeffries, success for the APHINITY trial could add as much as $17 billion to Roche's market value. Failure on the other hand could erase $30 billion.

71. Roche held its fourth quarter 2016 earnings call on February 1, 2017. On the call Defendant O'Day addressed the heightened anticipation surrounding the APHINITY study results: "APHINITY, we're all looking forward to those results. We expect, as I mentioned at JPMorgan, we've got all the events in now, the data is being cleaned, it's a very comprehensive study. We will have a read-out obviously between today, because I'm not announcing the APHINITY results

[4] ASCO is the American Society of Clinical Oncology. The Annual Meeting brings together more than 32,000 oncology professionals from around the world to discuss state-of-the-art treatment modalities, new therapies and ongoing controversies in the field. *See* https://am.asco.org/about.

today. And at the end of the first quarter, I can assure you as soon as we have the results, shortly after you will have the results, so I don't have any additional information on APHINITY. We have to see the read-outs as I've said before, the signals are good relative to what we've seen in neoadjuvant and elsewhere, but we'll see how the APHINITY trial reads out."

72. Indeed, results from the APHINITY study were the single thing on Roche investors' minds. A Bernstein analyst characterized investors as "nearly paralyzed" by the pending APHINITY read out.

73. Defendants were well aware that the bar for success of the APHINITY study was set high given that adjuvant treatment of HER2-positive breast cancer with the current standard of care- Herpectin plus chemotherapy- was so efficacious. Defendants knew that analysts and investors viewed a "positive" trial as one not just where the trial met its primary endpoint but one that demonstrated a meaningful difference in reducing the risk of cancer recurrence amongst all groups of patients in the trial who were given Perjeta.

74. Defendants were aware that this meant that to be considered "positive" the addition of Perjeta would need to show at least a 20% improvement in disease free survival in the *overall* patient population. On February 15, 2017 J.P. Morgan analysts stated "we maintain our confidence in a positive trial readout

with at least a 20% improvement in Disease Free Survival (DFS) in the overall population." (Emphasis added).

75. UBS likewise noted the implications of any announcement by Roche that the trial results were positive. "If APHINITY is positive, Perjeta can insulate Roche from biosimilar competition against Herceptin…We find that Perjeta will need to deliver a ~20% risk reduction for the results to be statistically significant. Therefore, we think any positive result is likely to be clinically meaningful. In the US, this is probable to lead to rapid adoption."

76. Additionally, given Defendants' positions as high-ranking executives at the world's largest biotechnology company Defendants had a thorough understanding of how drug trials were conducted and were well aware of the fact that evaluations of patient benefit from a drug must weigh the magnitude of the positive effect against the potential negative side effects. Defendants were likewise aware that patients, clinicians and health insurance companies also weighed the monetary costs of a drug against the magnitude of its benefit in deciding whether to prescribe it/provide insurance coverage for it.

77. The benefits of the combined Perjeta/Herceptin treatment tested by the APHINITY study, taking into account the costs of the treatment was widely discussed by analysts and commented on by clinicians. A February 14, 2017 Bloomberg article questioned: "will the combination continue to pay off for

proposed new use? Trial results of the combination are expected by the end of March, but one of the key questions that analysts are exploring is how will it stack up against the already successful Herceptin combined with chemotherapy? And will it be cost effective compared to the older drug?"

78. The Bloomberg article went on to discuss the high bar that the study would have to reach to deem the APHINITY study a success: "…And to be considered a success, the bar is set high for Roche. The study will need to show that 90 percent of the women on the combination of Herceptin and Perjeta will see no return of their cancer for at least two years. If the combination doesn't meet that goal, up to $4.9 billion in Herceptin sales could be at risk as cheaper copies enter the market…If approved, the combination drug is expected to have a monthly price tag of about $6,000. But will that price tag be too much, especially considering that so many women are already responding so well to Herceptin treatments? That's something the data will have to show. ***If the combination drug does not show strong benefits***, Jame Abraham, director of the Cleveland Clinic's breast oncology program, told Bloomberg the Swiss-based ***Roche will have a hard time selling the drug***." (Emphasis added).

79. Similarly, a February 15, 2015 NASDAQ article aptly titled "Roche's Herceptin and Perjeta Combination Trials Beg a Large Question" noted the weighty implications of the APHINITY study results: "Roche's results from trials

of the Herceptin and Perjeta combination therapy for 'after surgery breast cancer' applications are eagerly awaited. Why? Simply because investors expect Roche to come up with novel combination therapies and make its portfolio resilient against inevitable biosimilar competition…Nearly 75% of Roche's cancer drug sales and more than 50% of its pharmaceutical sales will be impacted to an extent as competition from biosimilars emerges."

Defendants Misleadingly Tout "Positive" Results From the APHINITY Study Causing the Largest Price Increase in Roche ADS in Eight Years

80. On March 2, 2017, Roche issued a press release announcing positive results from the APHINITY study, informing the market that indeed, the addition of Perjeta to Herceptin and chemotherapy after surgery resulted in patients living longer without their cancer returning. The press release, entitled, "Phase III APHINITY study shows Roche's Perjeta® regimen helped people with an aggressive type of early breast cancer live longer without their disease returning compared to Herceptin® and chemotherapy," stated in pertinent part:

> **Phase III APHINITY study shows Roche's Perjeta® regimen helped people with an aggressive type of early breast cancer live longer without their disease returning compared to Herceptin® and chemotherapy**
>
> - ***Perjeta plus Herceptin and chemotherapy showed a statistically significant improvement in invasive disease-free survival (iDFS) for people with HER2-positive early breast cancer (eBC) compared to Herceptin and chemotherapy alone***

- Data will be discussed with health authorities, including the US Food and Drug Administration (FDA) and European Medicines Agency (EMA)

Roche (SIX: RO, ROG; OTCQX: RHHBY), the Breast International Group (BIG), Breast European Adjuvant Study Team (BrEAST) and Frontier Science Foundation (FS) today announced positive results from the phase III APHINITY study. The study met its primary endpoint ***and showed that adjuvant (after surgery) treatment with the combination of Perjeta® (pertuzumab), Herceptin® (trastuzumab) and chemotherapy (the Perjeta-based regimen) achieved a statistically significant reduction in the risk of recurrence of invasive disease or death (invasive disease-free survival; iDFS) in people with HER2-positive early breast cancer (eBC)*** compared to Herceptin and chemotherapy alone. The safety profile of the Perjeta-based regimen was consistent with that seen in previous studies[1], and ***no new safety signals were identified***. Full results from the APHINITY trial will be presented at an upcoming medical meeting in 2017.

(Emphasis added).

81. The announcement of this long awaited good news caused the largest one-day increase in the price of Roche shares in eight years, according to Bloomberg. On March 2, Roche ADS closed nearly 6% higher than the day prior, trading at over four times the prior day's volume.

82. Analysts and investors reacted to the press release with vigorous enthusiasm. Analysts upgraded Roche and issued positive statements. Investors traded the shares up at substantially higher than average volume. Jeffries rated Roche a "buy" noting "Wait is over, though need details to assess full upside…If Perjeta/Herceptin combination becomes the new gold standard treatment in the

adjuvant treatment of HER2+ breast cancer it will also help protect the current Herceptin franchise from biosimilar threat. ***This is crucially important as around three-quarters of Herceptin's sales come from adjuvant use***." (Emphasis added).

83. Responding to the good news, Morgan Stanley rated Roche "overweight" with an industry view of "attractive," stating "Positive APHINITY results for Perjeta are key to protect the CHF10 bn breast cancer franchise. ***Upcoming submission suggests clinical meaningfulness data***…These positive results remove a major overhang for Roche (we and consensus were expecting up to 10% negative reaction in case of a failure). As a reminder this is a key driver to protect Roche's breast cancer franchise against upcoming biosimilars of Herceptin." (Emphasis added).

84. J.P. Morgan again reiterated that despite the limited detail in the March 2 press release Roche's statement meant that the addition of Perjeta increased disease free survival by at least 20%: "This morning Roche announced positive results from the APHINTY trial testing whether the addition of Perjeta to Herceptin and chemotherapy in the adjuvant (post surgery) setting increased DFS (disease free survival—time when a patient is alive and their cancer has not returned). ***While there is limited detail in the press release other than the positive headline we know from our previous statistical analysis that the minimum benefit is 20% which is clinically relevant."*** (Emphasis added).

85. Reaction to this positive news was so strong that it caused shares of Roche's rival, Puma Biotechnology, which was set to report data for its breast cancer drug neratinib that year, to fall 12%.

86. Analysts noted that the tremendous market opportunity of the positive results from the APHINITY study was a terrific lift for Roche. Bloomberg analyst Naomi Kresge explained: "The study was vital for Roche to defend its cancer franchise as Herceptin, the company's second-best seller, faces its first competition from cheaper copies. The trial had a high hurdle to clear: since it was introduced in 1998, Herceptin has transformed treatment for women with an aggressive type of early breast cancer, essentially curing more than four out of five patients when used with chemotherapy after surgery. ***About 70% of Roche's $6.8 billion in Herceptin revenue last year came from patients who might benefit from the combination. Sales of Herceptin and Perjeta together could reach $9 billion by 2021***, analysts estimated before the study went public." (Emphasis added).

87. Analysts and investors, like Defendants, were well aware that the APHINITY trial had to show a strong clinical benefit in order for it to be considered a success. As a Jeffries analyst explained: "Current Herceptin monotherapy treatment is already highly successful and represents a high hurdle to beat ***which makes the positive 'Aphinity' outcome all the more impressive.***" (Emphasis added). The analyst went on to note "…for the Perjeta/Herceptin

combination to become widely used as a new standard of care, we will likely need to see a strong clinical benefit demonstrated by the data, ***as well as*** the statistically significant benefit."

88. Investors' and analysts' positive reactions to the March 2 press release demonstrate the unmistakable message Defendants conveyed in issuing it: that the APHINITY study was a success and that its results meant that the Perjeta/Herceptin combination would be prescribed by physicians treating patients with HER2-positive breast cancer after surgery.

89. Defendants insisted that presentation of the full results from the APHINITY study would have to await the June ASCO conference, but assured the market that the results were "terrific" and that the data from the study was "clinically meaningful."

90. Defendant O'Day discussed the results of the APHINITY study on Roche's April 27, 2017 first quarter investor conference call (the "1Q 2017 Investor Call"). O'Day stated: "And with the APHINITY trial, you see now that chart nicely filled out, essentially with ***one medicine in combination has been able to improve the standard of care systematically across metastatic, neoadjuvant and now adjuvant.*** APHINITY met its primary endpoint of reducing the risk of recurrence of invasive disease or death compared to Herceptin and chemo alone**.** ***And this is really I think terrific news for patients because we're really talking***

about a curative setting here with early breast cancer. We are really looking forward to presenting the results to you at ACSO….Based on the APHINITY results, I mean, ***we can absolutely be confident to continue to grow this franchise through the introduction of biosimilars***, which will start in Europe in the second half of this year." (Emphasis added). Accordingly, O'Day assured the market that the APHINITY study outcome was "terrific news" and that the improvement that Perjeta brought to breast cancer patients when used in an adjuvant setting would provide Roche with the market opportunity necessary to thwart erosion in the Company's sales growth from biosimilar competition.

91. On the 1Q 2017 Investor Conference Call Defendant O'Day fielded questions from analysts about the APHINITY study:

> Q: I know you don't want to say much on APHINITY ahead of ASCO, ***but hoping I can get your level of confidence from the robustness of the results in another way because, as you know, there's lots of debate about the magnitude and the benefit and that sort of thing***. So consensus currently models peak Perjeta sales of around CHF[5] 4.5 billion. As a reference of course, Herceptin currently falls around CHF 7 billion a year. I'm hoping you can give us some indication whether you think those out-year numbers seem reachable or could they be too high or low.

92. O'Day responded, assuring investors that while the full results could not be divulged until the ACSO conference, the results were clinically meaningful

[5] "CHF" indicates Swiss Francs. 1 CHF equals approximately $1.07, presently. During the Class Period on average, 1 CHF was equal to approximately $1.03.

and demonstrated a clinically meaningful reduction in the recurrence of disease in patients treated with the Perjeta/Herceptin combination:

> So yeah, you're right. I mean, obviously for the sake of the cooperative group, for our sake, for the sake of ASCO, we have to really wait until ASCO to get into the details. But suffice it to say that we think this is the data we filed, where we think ***the data shows a reduction in risk recurrence in invasive breast cancer and we think they're clinically meaningful.*** I think that's about as much as I'm going to open the envelope on today until you see the additional data. (Emphasis added).

O'Day additionally reassured the market that the use of Perjeta in an adjuvant setting would thwart biosimilar competition because Perjeta now showed a "significant increase in the standard of care" in "all the indications":

> ..[A]s we look forward at the HER2 franchise, we consider that—we're still going to compete on Herceptin. I mean, that doesn't go away. ***We've now got Perjeta showing significant increase in the standard of care and all the indications*** at a 2x price. It doesn't take a lot of faith to suggest and to be convinced that we can grow this franchise through the biosimilar erosion, particularly because, remember, the biosimilar erosion curve is not happening in one year, but it's happening over multiple years…it enters first in Europe and enters in the U.S. And of course, how it enters will allow us to make sure that we can have sufficient time to get the update on Perjeta around the globe. (Emphasis added).

The Individual Defendants and Corporate Executives Sell Over $13 Million in Roche Securities Over the Next Three Months

93. Beginning on March 3, 2017, just one day after Defendants issued the press release misleadingly touting positive results for the APHINITY study,

executive members of Roche's board of directors began selling shares of Roche on the Swiss Exchange (the "SIX").

94. For issuers listed on the SIX (Swiss Exchange), executive management must submit transaction records for all purchases and sales of the issuer's securities to the SIX. These records are available on the OTC Markets website.

95. Trading on the SIX is regulated by Switzerland's Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (FMIA). The SIX Swiss Exchange Listing Rules ("SIX Listing Rules") govern the listing of equity securities on the SIX. Article 56 of the SIX Listing Rules governs the disclosure of management transactions. (*See* SIX Listing Rules at pages 18-19 attached hereto as Exhibit 1). Article 56 states that an issuer whose securities have their primary listing on the SIX must ensure that members of the board of directors and its executive committee report transactions in the issuer's equity securities or related financial instruments to the issuer. (*See* Exhibit 1, Article 56 par.2). This notification to the issuer, here Roche, must contain the name of the person responsible for the transaction, as well as other information such as the type of transaction and the value of the transaction. (*See* Exhibit 1, Article 56 par. 4). The issuer must then report that information to the SIX, except that the issuer is *not* required to report the name of the person responsible for the

transaction. Accordingly, the records containing the Class Period insider sales available on the OTC Markets website do not contain the names of the individual executing the transaction.

96. Roche securities (non-voting equity securities and bearer shares) are traded on the SIX under the symbols RO (bearer shares) and ROG (non-voting equity securities). While the published notifications of management transactions on the SIX do not list the names of the specific individual who executed the transaction they do indicate whether the individual was a member of the Corporate Executive Committee.

97. During the Class Period there were six members of Roche's corporate Executive Committee: Defendant Schwan, Defendant O'Day, Defendant Hippe, Defendant Keller, non-Defendant Diggelmann, and non-Defendant Wilbur. Each of these individuals was aware of the complete results and data from the APHINITY study on or before March 2, 2017 and understood its implications for Roche's sales, profits and share price.

98. While in possession of this material non-public information, these insiders sold over $13.1 million worth of Roche securities at artificially inflated prices.

99. As part of its compensation package, Roche issued Stock-Settled Stock Appreciation Rights (S-SARs) to certain directors, management and

employees. The S-SARs give employees the right to receive non-voting equity securities reflecting the value of any appreciation in the market price of the non-voting equity securities between the grant date and the exercise date. The S-SARs have a seven-year duration and vest on a phased basis over 3 years. (*See* Roche's 2016 Finance Report, page 94, attached hereto as Exhibit 2). According to Exhibit 2, each year's S-SAR grant is made at a specific strike price equal to the market price on the date of grant, and has a specific expiration date for the S-SAR grant.

100. Roche's 2016 Finance Report indicates the total number of S-SAR's held by each of the Individual Defendants and members of the Corporate Executive Committee as of December 31, 2016 and the year of grant, strike price and expiration date. (*See* Roche 2016 Finance Report page 153, attached hereto as Exhibit 2). The 2016 Finance Report also indicates the number of S-SAR's issued to each of the Individual Defendants and members of the Corporate Executive Committee in 2016. (*See Id*.) Likewise, Roche's 2017 Finance Report indicates the total number S-SAR's held by each of the Individual Defendants and members of the Corporate Executive Committee as of December 31, 2017, by year of grant, and the number of S-SARs issued to each of the Individual Defendants and members of the Corporate Executive Committee in 2017. (*See* Roche 2017 Finance Report, page 157, attached hereto as Exhibit 3).

101. The chart in Table 1 below shows the number of S-SARs held by the members of Roche's Corporate Executive Committee as of the 2016 year-end and as of the 2017 year-end as well as the amount of S-SAR's issued to each of those individuals in 2017. Accordingly, the number of S-SARs sold by each individual in 2017 can be determined by subtracting the number of S-SARs held by the individual as of the 2017 year-end from the number of S-SARs held by the individual as of the 2016 year-end and then subtracting the number of S-SARs issued to the individual in 2017.

102. As noted above, while the published notifications of management transactions on the SIX do not list the names of the specific individual who executed the transaction they do indicate whether the individual was a member of the Corporate Executive Committee. These transaction records also indicate the type of rights sold and provide under "further transaction details" whether the transaction was an "exersale" of Roche Stock-Settled Stock Appreciation Rights. For transactions involving S-SARs the number of S-SARs is listed, as this number is different from the equivalent number of shares sold. For sales of S-SARs, the strike price and expiry date are listed, providing further information as to the identification of the seller.

103. The transaction records evidencing all of the Class Period insider sales of Roche S-SARs are attached hereto as Exhibit 4. These are the only insider sales of S-SAR's that took place during the entirety of 2017.

104. The chart in Table 1 indicates whether the insider transaction was for the sale of S-SARs and indicates the number of S-SARs sold per the transaction records in Exhibit 4. Based upon the information from the 2016 and 2017 Roche Finance reports which indicates the number of S-SARs each of the insiders sold in 2017, and the transaction records evidencing those sales, it is apparent that Defendants Schwan, Hippe, O'Day and Keller executed these S-SAR sales during the Class Period because the number of S-SARs in the transaction records in Exhibit 1 matches the number of S-SARs sold in 2017 per the information contained in Roche's Finance Reports[6].

[Table 1]

Individual Defendant/Corp. Exec. Committee Member	**Total S-SARs Held as of 12/31/2016**	**Total S-SARs Held as of 12/31/2017**	**S-SARs Issued in 2017**	**S-SARs sold in 2017 Per Roche Finance Reports**

[6] This is true for the transactions for all of the Individual Defendants except for Keller. Based upon the transaction records filed on the OTC Marketplace website Keller reported sales of only 15,000 S-SARs in 2017, whereas the information in the Roche Finance Reports shows that he sold 41,000 S-SARs in 2017. Roche must have failed to report 26,806 S-SARs that Keller sold during 2017. Because Diggelmann and Wilbur did not sell any S-SARs during 2017, the 15,000 S-SARs sale on 3/5/23017 had to be Keller's because Keller was the only member of the Corporate Executive Committee to own 15,000 S-SARs with a strike price of CHF157.50 and expiry date of March 2019. Keller therefore sold an additional 26,806 S-SARs during 2017 that may have been sold during Class Period. However, this is not determinable without discovery because Roche violated SIX regulations by failing to timely report the transactions.

Schwan		275,439	319,443	85,476	41,472
Diggelmann		109,050	136,836	27,786	0
Hippe		110,187	115,788	34,191	28,590
Keller		118,303	108,549	32,052	41,806
O'Day		148,920	166,605	53,424	35,739
Wilbur		31,973	48,005	16,032	0
Seller	**Date of Sale**	**# of SSARs Sold Per OTC Transaction Records**	**ROG share equivalent**	**Proceeds in CHF**	
Schwan	5/10/2017	41,472	8,190	2,129,400	
Hippe	3/5/2017	28,590	5,476	1,423,760	
Keller	3/3/2017	15,000	5,983	1,555,580	
O'Day	3/5/2017	35,739	6,834	1,776,840	
Total		**120,801**	**26,483**	**6,885,580**	
In Dollars				**$7,092,147.4**	

105. In addition, the Roche 2017 Finance Report indicates the number of (bearer) shares as well as the number of non-voting equity securities held by each Individual Defendant and Member of the Corporate Executive Committee at the 2016 year and at the 2017 year end. A chart detailing this information is found at the top of page 157 of the Roche 2017 Finance Report, attached hereto as Exhibit 3. Based upon this information, Defendant Schwan, in addition to his sales of S-SARs, sold 2,796 Roche non-voting equity securities in 2017. The average price of Roche shares on the SIX during the Class Period was approximately 260 CFH per share, or $267.80. Accordingly, the proceeds of Schwan's sale of 2,796 non-voting equity securities during the Class Period is $748,769.

106. In addition to the four insider transactions involving sales of S-SARs during the Class Period, which reaped Defendants proceeds of approximately $7.1 million, six additional insider sales of Roche securities occurred during the Class Period. These six management transactions which the Individual Defendants were required to report to Roche and which Roche was require to publish on the SIX are available on OTC Markets website are attached hereto as Exhibit 5. Once again, while these transactions do not list the names of the specific individual who executed the transaction they do indicate whether the individual was a member of Roche's Corporate Executive Committee. Each of the transactions in Exhibit 5 indicates that the sale was executed by a member of the Corporate Executive Committee. In addition, these are the only sales of Roche securities (that are not S-SARs) that took place during the entirety of 2017 based upon the transaction records available on the OTC Markets website that Roche was required to publish.

107. The chart in Table 2 below shows all of the insider sales of Roche securities by members of the Corporate Executive Committee during the Class Period and the type of rights that were sold (i.e. S-SARs, bearer shares or other securities).

[Table 2]

Date	Price in Swiss Francs	Shares	Type of Rights	Number of S-SARs	Seller if known
3/3/2017	1,567,546	5,983	S-SAR	15,000	Keller
3/29/2017	684,288	2,673	Other Securities		
3/30/2017	1,164,612	4,514	Other Securities		
5/3/2017	2,385	9	Bearer Shares		
5/3/2017	1,448,679.40	5,476	S-SAR	28,590	Hippe
5/3/2017	1,808,310.80	6,834	S-SAR	35,739	O'Day
5/2/2017	328,174.75	1,249	Bearer Shares		
5/2/2017	2,849,012	10,876	Other Securities		
5/10/2017	730,057.50	2,742	Bearer Shares		
5/10/2017	2,186,691.30	8,190	S-SAR	41,472	Schwan

Total CHF	12,769,757	48,546		120,801	
Total Dollars	$ 13,152,849				

108. As indicated by the chart in Table 2 above, members of Roche's Corporate Executive Committee sold a total of approximately $13.1 million in Roche securities during the Class Period. Of those securities, $7,092,147.4 in proceeds are attributable to sales of S-SARs held by the Individual Defendants (See Table 1 above) and approximately $748,769 in proceeds are attributable to additional non-voting equity securities that Defendant Schwan sold. The remaining $5,311,933 in proceeds are attributable to sales of securities held by members of the Corporate Executive Committee. However the limited information provided in Roche's Finance Reports and the information in the records of management transactions in Exhibits 4 and 5 do not indicate which specific individuals executed the remaining $5,311,933 in sales.

109. These ten suspiciously timed insider stock sales- which began just one day after issuance of the false and misleading March 2 press release and ceased about three weeks before the true study results were revealed at the ASCO conference- were not linked to the expiration of shares under a 10b5-1 trading plan. These sales were also suspiciously disproportionate in both the number of insider sales executed during this period as well as the proceeds received. In the

same period a year earlier, there was only one insider sale valued at around 2 million Swiss francs.[7]

110. These insider sales were unusual in both timing and amount. In contrast to the ten insider sales by members of Roche's Corporate Executive Committee during the Class Period totaling $13.1 million there were only 3 insider sales by members of Roche's Corporate Executive Committee in 2016 totaling under $5.7 million (less than half the value of the insider sales during the three month Class Period), and 3 insider sales by members of Roche's Corporate Executive Committee in 2015 totaling under $2.9 million (less than one quarter of the value of the insider sales during the three month Class Period).

111. By engaging in these insider sales Defendants illegally profited in these trades between March 2, 2017, the date of the misleading announcement of the APHINITY study's top-line results, and June 5, 2017, the date Roche announced the results of the full study presented at ASCO.

ROCHE Presents the Full Details of the APHINITY Study at ASCO Shocking Clinicians and the Market

112. On June 5, 2017, Roche revealed to the market the true results and data from the APHINITY study which demonstrated that addition of Perjeta after surgery showed less than a 1% benefit, barely passed the test of statistical

[7] Source: Wall Street Journal, August 14, 2017.

significance, was not clinically meaningful, caused higher rates of diarrhea, and had serious implications for potential cardiac side effects.

113. Roche's June 5, 2017 press release revealed the following results from the APHINITY study:

> At three years, ***94.1%*** of people treated with the Perjeta-based regimen did not have their breast cancer return ***compared to 93.2%*** treated with Herceptin and chemotherapy.
>
> ***
>
> At the time of the primary analysis, with median follow-up of 45.4 months, the reduction in risk of invasive breast cancer recurrence with the Perjeta-based regimen was greatest in people with lymph node-positive (HR=0.77; 95% CI 0.62-0.96, p=0.019) or hormone receptor-negative disease (HR=0.76; 95% CI 0.56-1.04, p=0.085).[1] At three years, among people with node-positive disease, 92.0% of people treated with the Perjeta-based regimen did not have their breast cancer return compared to 90.2% treated with Herceptin and chemotherapy, and iDFS rates in the hormone receptor-negative disease subgroup were 92.8% in the Perjeta-based arm and 91.2% in the Herceptin and chemotherapy arm.[1] ***The number of events in both treatment arms was low in people with node-negative disease, where no benefit with the Perjeta-based regimen was detected at this time***.
>
> (Emphasis added).

114. Accordingly, the results from the APHINITY study show that among the entire patient population the rate of cancer recurrence in patients treated with Perjeta after 3 years was just 0.9% less than the rate of cancer recurrence in patients not given Perjeta after three years. This meant that Perjeta provided no meaningful clinical benefit to breast cancer patients after surgery.

115. Analyst Adam Feuerstein noted that the "p value" demonstrated by the trial was 0.045, within a "hair" of failing the test for statistical significance.

116. Worse yet, this entire purported improvement in the rate of cancer recurrence was attributable to one subgroup within the trial, patients with lymph node positive status. Accordingly, Roche's claim that the addition of Perjeta showed statistically significant improvement in disease-free survival was misleading as it was driven entirely by one subset of patients in the trial.

117. Additionally, while Roche claimed that "no new safety signals were identified" in the group of patients treated with Perjeta, the addition of Perjeta was associated with a higher rate of diarrhea: 71.2% of patients in the Perjeta group experienced grade 1 or 2 diarrhea whereas only 45.2% of patients in the placebo group did. Diarrhea in cancer patients can often lead to hospitalization and complications. Worse yet, primary cardiac events occurred in 17 patients in the Perjeta group compared to 8 patients in the placebo group. 15 patients in the Perjeta group experienced Class III or IV heart failure and substantial decrease in left ventricular ejection fraction, compared with 6 in the placebo group. Further, the rate of patient discontinuation due to adverse events was 1.1 percentage points higher in the group of patients treated with Perjeta compared to those treated with placebo.

118. On this news, Roche ADS fell by $1.76 per share or approximately 5.12% from its previous closing price to close at $32.61 per share on June 5, 2017, damaging investors. The volume of trading in Roche ADS on June 5, 2017 was nearly ***seven and a half times*** the volume of the prior trading session. This stock price decline wiped out the prior gains from Defendants' March 2 press release which misleadingly touted positive results from the APHINITY study.

119. In the wake of this news, media outlets commented on the disappointing results. A June 5 article in the *Financial Times* stated "Roche's hopes of protecting its $7bn breast cancer franchise with a new drug cocktail were dealt a blow after a large trial showed the combination was only marginally better than an older medicine made by the company."

120. The article went on to note the marginal 0.9 percentage point difference: "After three years, 94.1 per cent of patients taking the cocktail were disease-free, versus 93.2 per cent of those on Herceptin alone, according to the data, which were presented at the world's largest cancer meeting on Monday." The President of ASCO, Dr. Daniel Hayes was quoted in the article, commenting on the severe adverse side effects as well as the costs of the combination of the two drugs: "Dr. Hayes said oncologists might refrain from using the new combination not just for cost reasons, but also because Perjeta causes severe diarrhoea in some patients. In the clinical trial, roughly one in 10 patients experienced grade three

diarrhoea, which means a person can struggle to control their bowel movements and may need to be treated in a hospital or clinic. 'I hope we'll be thoughtful about how we use Perjeta — without causing unnecessary diarrhoea, and without breaking the bank,' he said."

121. *Bloomberg* likewise noted the costs of the drug combination and that the trial barely showed a statistically significant difference in disease free survival between the two groups: "Roche Holding AG's new breast cancer combination therapy barely outperformed a current gold-standard drug for the disease -- the company's own decades-old Herceptin -- in its latest study…. Adding Roche's new medicine Perjeta to Herceptin -- which could double the current monthly cost of $6,100 -- resulted in about 1 percentage point of improvement in the proportion of women who lived at least three years without tumors returning. For patients with less severe cancer, where tumors hadn't spread to the lymph nodes, Perjeta didn't help at all."

122. Additionally, Roche's bad news was good news for its rival Puma Biotech, (whose stock had fallen when Defendants misleadingly touted the positive results of the APHINITY study in the March 2 press release): "[s]hares of rival Puma Biotechnology Inc. jumped 11 percent to $90.70. The underwhelming Roche data could benefit Puma, which also has an experimental drug used in addition to Herceptin."

123. The harsh reaction by oncologists- the ultimate decision-makers as to whether to prescribe Perjeta in an adjuvant setting- confirms that for all practical purposes, the study's results were anything but positive.

124. In an article by Dr. Kathy D. Miller published in the *New England Journal of Medicine*, entitled "Questioning Our APHINITY for More," Dr. Miller explained: "A determination of clinical significance is necessarily more nuanced than the hard numbers that determine statistical significance." In other words, while the APHINITY study (barely) showed a statistically significant difference between the two groups of patients, the results were not clinically meaningful. Dr. Miller highlighted the toxic effects associated with Perjeta, something Defendants misleadingly omitted from their March 2 press release announcing the study's top-line results: "***The short-term and long-term toxic effects associated with the incorporation of pertuzumab [Perjeta] into treatment are not inconsequential***. Increases in diarrhea and rash during therapy were expected, but although troublesome, they rarely led to treatment discontinuation. However ***the potential increase in cardiac toxic effects, with their attendant long-term consequences requires greater attention***." Dr. Miller unequivocally concluded: "***The toxic effects (and cost) are too great for too many to benefit too few.***" (Emphasis added).

125. Oncologists in attendance at the ASCO conference, where Roche presented the results from the APHINITY study, confirmed that clinicians would not prescribe Perjeta in an adjuvant setting based on the results of the APHINITY study. Dr. William Sikov, from the Program in Women's Oncology at the Women and Infants Hospital of Rhode Island and Associate Professor of Medicine at the Alpert Medical School of Brown University, commented on the marginal benefit compared to the high cost of adding Perjeta: "To treat 100 patients with pertuzumab [Perjeta] on top of standard therapy would cost $10 million dollars. With a 2% improvement, this means paying $5 million for each patient who does not recur, and ***the study will never demonstrate a survival advantage***. I can think of a lot better things to do with $5 million [of health-care dollars]," Dr. Sikov commented. Dr. Sikov continued: "The problem is that we don't live in utopia, where treatments have no financial or toxicity costs… ***Until we have more robust clinical or biologic indicators for which patients are going to benefit from these treatments, it would be irresponsible to add these to our standard regimens*** for a wide range of patients who are at slightly higher risk. These are patients who do very well with standard therapy." (Emphasis added).

126. Renowned Oncologist Dr. Steven Vogl, who is affiliated with Montefiore Medical Center in New York City and White Plains Hospital, published a detailed article in the *ASCO Post* stating that the data from the

APHINITY study did not show a statistically significant benefit: "The proper interpretation of these data is that distant events may be delayed or prevented by adding pertuzumab [Perjeta], ***but so far this benefit is not statistically significant, nor has a significant improvement in distant disease-free survival been reported*** (there will be some deaths without prior distant disease, usually not due to the breast cancer itself)." Dr. Vogl concluded: "***So far, pertuzumab [Perjeta] has not improved overall survival at all, nor has it reduced distant relapses to a statistically significant extent***…Except in situations of extraordinary risk (HER2-porisive cancer that is locally advanced or with massive matted axillary nodes), ***the argument for recommending adjuvant pertuzumab are weak, and those for investing the huge resources demanded to pay for it are even weaker***…" (Emphasis added).

127. Despite the consensus by Oncologists that the study was a disappointment, Jose Baselga spoke at ASCO telling analysts that the critiques were "weird" and "strange."

128. Analysts responded harshly to news of the APHINITY study results, lowering their forecasts and price targets for Roche securities. Analyst Liberium's comment confirms the false and misleading nature of Defendants' March 2 press release, in which he said: "[t]his was not the result that we or consensus were

looking for, particularly given the positive update in March and the powering of the trial".

129. Credit Suisse removed Roche from its "Focus List" stating "[w]e remove Roche from the Credit Suisse Focus List following disappointing headline APHINITY data on the efficacy of the Perjeta/Herecptin combination in HER2+ breast cancer…We no longer see the risk/reward profile as acceptable for a Focus List stock"

130. The day after Roche revealed the true results from the APHINITY study HSBC cut its forecast and price target, commenting on the implications of the study results: "APHINITY data a disappointment...The primary efficacy end-point, the difference in invasive disease-free survival just hit statistical significance [ ]… The weak APHINITY data have bigger implications than Perjeta not being included with Herceptin in the standard of care on HER2+ve breast cancer. If APHINITY had been more positive, it would at least have given Roche the chance to bundle Herceptin and Perjeta in the adjuvant setting and set a competitive price in light if imminent biosimilar competition. ***That opportunity is now gone, leaving the HER2 breast cancer franchise more exposed to biosimilar competition."*** (Emphasis added).

131. The same day Kepler Cheveux likewise lowered its price target for Roche, noting not only the marginal results from the study but the costs and safety risks of adding Perjeta to adjuvant treatment:

> The disappointing APHINITY results at ASCO yesterday mean Perjeta in adjuvant will likely only be used in a minority of high-risk patients…The absolute incremental benefit provided by Perjeta was to prevent cancer recurring in just 0.9% of women in the study. This is lower than the markets, and we, had imagined. ***As we highlighted before, this would imply a treatment cost of up to USD7m per cancer recurrence prevented across the whole study population (which was already enriched with high-risk patients with node-positive cancers)…To add to low efficacy, another concern is that the safety of adding Perjeta is not as benign as we had thought***. Cardiac issues are a meaningful concern: heart failure of cardiac death in 0.7% of patients on Perjeta (vs. 0.3% on the control arm, borderline significant) is a disincentive for lower-risk patients to get Perjeta. ***Additionally, 10% of patients saw severe (grade >=3 diarrhoea (versus 4%): another reason not to use Perjeta***."
>
> ***
>
> "***universal usage of Perjeta across the adjuvant HER2 population is not going to happen…We think pressure from biosimilars will start to dominate more of market thinking on Roche***. Roche has been clear that future margin expansion depends on the pipeline really delivering, but APHINITY has not."
>
> (Emphasis added).

132. Indeed, the given the true results of the APHINITY study, sales of Perjeta in the adjuvant setting did not increase, and revenues from a Herceptin/Perjeta combination did not offset lost revenues from Herceptin due to biosimilar competition in Europe, where a Herceptin biosimilar was already on the

market. In reporting on Q3 2017 a SeekingAlpha report stated: "HER2 franchise sales (Herceptin, Perjeta and Kadycycla) were CHF 1.4% lower than consensus, driven by a weak performance of Herceptin in Europe and Perjeta. ***It's worth noting that there hasn't been any acceleration of the growth trajectory for Perjeta after the disappointing results from the Phase III trial APHINITY, assessing the benefits of adding Perjeta to Herceptin in adjuvant HER2-positive breast cancer."*** (emphasis added).

133. Nearly all of the other conference participants concluded that the Study results were disappointing and were not clinically meaningful. It was not until after the close of the Class Period that Dr. Baselga's positive statements touting the Study results at the June 2017 ASCO conference made sense. He had been bought and paid for by Roche.

134. On September 8, 2018 the New York Times, in collaboration with the nonprofit journalism organization *ProPublica*, published an article entitled "Top Cancer Researcher Fails to Disclose Corporate Financial Ties in Major Research Journals." The article revealed that Dr. Jose Baselga, the Chief Medical Officer at Memorial Sloan Kettering Cancer Center in New York failed to disclose millions of dollars in payments from drug and health care companies, Roche most prominent among them. The article went on to state:

> At a conference this year and before analysts in 2017, he put a positive spin on the results of two Roche-sponsored clinical trials that

> many others considered disappointments, without disclosing his relationship to the company. Since 2014, he has received more than $3 million from Roche in consulting fees and for a stake in a company it acquired
>
> ***
>
> Among the most prominent relationships that Dr. Baselga has often failed to disclose is with the Swiss pharmaceutical giant Roche and its United States subsidiary Genentech. In June 2017, at the annual meeting of the American Society of Clinical Oncology in Chicago, Dr. Baselga spoke at a Roche-sponsored investor event about study results that the company had been counting on to persuade oncologists to move patients from Herceptin- which was facing competition from cheaper alternatives—to a combination treatment involving Herceptin and a newer, more expensive drug, Perjeta. The results were so underwhelming that Roche's stock fell 5 percent on the news. One analyst described the results as a "lead balloon," and an editorial in the New England Journal called it a 'disappointment.' Dr. Baselga, however, told analysts that the critiques were 'weird' and 'strange.'

135. The article noted that Dr. Baselga improperly concealed that his ties to Roche went beyond serving as a trial investigator in the APHINITY study. The article also revealed that in 2014 Roche acquired Seragon, a cancer research company that Baselga owned a stake in, for $725 million. Baselga received more than $3 million in 2014 and 2015 for his stake of the company. With respect to his failure to follow financial disclosure rules set by the American Association for Cancer Research he stated "I acknowledge that there have been inconsistencies, but that's what it is." ASCO said that it would conduct an internal review of Baselga's disclosures and refer the findings to a panel.

136. Several days after the New York Times article broke Baselga resigned as chief medical officer of Memorial Sloan Kettering, where he had been paid a salary of $1.5 million in 2016.

Materially False and Misleading Statements

137. The Class Period begins on March 2, 2017. By that time Defendants had the complete results from the APHINITY study, including all of the study data and a complete statistical analysis of the study data.

138. On March 2, 2017 Roche issued a press release entitled "Phase III APHINITY study shows Roche's Perjeta® regimen helped people with an aggressive type of early breast cancer live longer without their disease returning compared to Herceptin® and chemotherapy." The press release stated in pertinent part:

> **Phase III APHINITY study shows Roche's Perjeta® regimen helped people with an aggressive type of early breast cancer live longer without their disease returning compared to Herceptin® and chemotherapy**
>
> - ***Perjeta plus Herceptin and chemotherapy showed a statistically significant improvement in invasive disease-free survival (iDFS) for people with HER2-positive early breast cancer (eBC) compared to Herceptin and chemotherapy alone***
> - Data will be discussed with health authorities, including the US Food and Drug Administration (FDA) and European Medicines Agency (EMA)

> Roche (SIX: RO, ROG; OTCQX: RHHBY), the Breast International Group (BIG), Breast European Adjuvant Study Team (BrEAST) and Frontier Science Foundation (FS) today announced positive results from the phase III APHINITY study. The study met its primary endpoint ***and showed that adjuvant (after surgery) treatment with the combination of Perjeta® (pertuzumab), Herceptin® (trastuzumab) and chemotherapy (the Perjeta-based regimen) achieved a statistically significant reduction in the risk of recurrence of invasive disease or death (invasive disease-free survival; iDFS) in people with HER2-positive early breast cancer (eBC)*** compared to Herceptin and chemotherapy alone. The safety profile of the Perjeta-based regimen was consistent with that seen in previous studies[1], and ***no new safety signals were identified***. Full results from the APHINITY trial will be presented at an upcoming medical meeting in 2017.
>
> (Emphasis added).

139. The March 2 press release also described Roche and its study partners. In describing the Breast International Group (BIG) the press release stated that "BIG is a not-for-profit organization for academic breast cancer research groups from around the world, based in Brussels Belgium. Global collaboration is crucial to make significant advances in breast cancer research…Therefore, BIG facilitates breast cancer research at an international level, by stimulating cooperation between its members and other academic networks, and collaborating with, ***but working independently from, the pharmaceutical industry.*** (Emphasis added). This demonstrates that Roche fraudulently pointed to BIG's excellent reputation for reliable and independent clinical research to persuade investors that the Study results were strong, when in reality they were not.

140. The March 2 press release was materially false and misleading for the following reasons: (i) while the study technically met its endpoint it did not also show that adjuvant treatment with Perjeta, Herceptin and chemotherapy achieved a statistically significant reduction in the risk of recurrence of invasive disease-free survival in people with HER2-positive early breast cancer compared to Herceptin and chemotherapy alone because: a) the results barely met the test for statistical significance, b) the entire purported improvement in the rate of cancer recurrence was attributable to only one subgroup within the trial, c) the improvement in patients given Perjeta was marginal overall and would not be considered clinically significant by the medical community and prescribers; and (ii) new safety signals (*i.e.* dangers) were in fact identified because: a) the group of patients treated with Perjeta experienced significantly higher rates of diarrhea (1 in 10 patients with treated with Perjeta experienced severe diarrhea), which in cancer patients is dangerous and can lead to hospitalization, b) the group of patients treated with Perjeta experienced substantially higher incidents of primary cardiac arrest and heart failure, (c) the rate of patient discontinuation due to adverse events was 1.1 percentage points higher in the group of patients treated with Perjeta compared to those treated with placebo. At the very least, Defendants were required to disclose that the overall difference in study patients treated with Perjeta compared to those treated with placebo was marginal, that the improvement inured only one

subgroup, and that patients treated with Perjeta experienced higher rates of diarrhea and other adverse events in order to make the press release not materially false and misleading. Additionally, Defendants were aware that the above statements were materially misleading because: (i) they were aware of the high bar for success of the APHINITY study; (ii) they were aware of analysts' and the markets' expectations and standards for the APHINITY study to be deemed a success, and were aware that the study results did not in fact meet those standards; and (iii) they were aware that once the true results of the study were made public the reaction on the part of clinicians, analysts and investors would be overwhelmingly negative.

141. The March 2 press release was materially false and misleading for the additional reason that it affirmatively represented Roche's study partner, BIG, as "working independently from the pharmaceutical industry" but failed to disclose that Roche had made payments of over three million dollars to Jose Baselga, an executive member of BIG and collaborator and author of the APHINITY study. Once Defendants touted the Study results by relying on the purported independence of BIG, Defendants were duty-bound to disclose this blatant conflict of interest to prevent their positive statements about the Study results from misleading investors.

142. Defendant O'Day discussed the results of the APHINITY study on Roche's April 27, 2017 first quarter investor conference call (the "1Q 2017 Investor Call"). O'Day stated: "And with the APHINITY trial, you see how that chart nicely filled out, essentially with ***one medicine in combination has been able to improve the standard of care systematically across metastatic, neoadjuvant and now adjuvant.*** APHINITY met its primary endpoint of reducing the risk of recurrence of invasive disease or death compared to Herceptin and chemo alone**.** ***And this is really I think terrific news for patients because we're really talking about a curative setting here with early breast cancer. We are really looking forward to presenting the results to you at ACSO****….****Based on the APHINITY results, I mean, we can absolutely be confident to continue to grow this franchise through the introduction of biosimilars***, which will start in Europe in the second half of this year." (Emphasis added). Accordingly, O'Day assured that market that the results of the APHINITY study outcome was "terrific news" and that the improvement that Perjeta brought to breast cancer patients when used in an adjuvant setting would provide Roche with the market opportunity necessary to thwart erosion in the Company's sales growth from biosimilar competition.

143. O'Day additionally reassured the market that the use of Perjeta in an adjuvant setting would thwart biosimilar competition because Perjeta now showed a "significant increase in the standard of care" in "all the indications":

> ..[A]s we look forward at the HER2 franchise, we consider that—we're still going to compete on Herceptin. I mean, that doesn't go away. ***We've now got Perjeta showing significant increase in the standard of care and all the indications*** at a 2x price. It doesn't take a lot of faith to suggest and to be convinced that we can grow this franchise through the biosimilar erosion, particularly because, remember, the biosimilar erosion curve is not happening in one year, but it's happening over multiple years…it enters first in Europe and enters in the U.S. And of course, how it enters will allow us to make sure that we can have sufficient time to get the update on Perjeta around the globe. (Emphasis added).

144. The above statements Defendant O'Day made on the 1Q 2017 Investor Conference Call were materially false and misleading because the results of the APHINITY trial did not "improve the standard of care" in the adjuvant setting due to the facts that: a) the National Cancer Institute defines "standard of care" as "treatment that experts agree is appropriate, accepted and widely used"; b) given this definition the APHINTY trial did not "improve the standard of care" because the study results only supported using the treatment in one subgroup of patients c) the results barely met the test for statistical significance; d) the entire purported improvement in the rate of cancer recurrence was attributable to only one small subgroup within the trial and would not protect Herceptin sales from biosimilar competition; e) the improvement in patients given Perjeta was marginal overall and would not be considered clinically significant by the medical community and prescribers; and f) the group of patients treated with Perjeta experienced significantly higher rates of diarrhea (1 in 10 patients with treated with

Perjeta experienced severe diarrhea), which in cancer patients can lead to hospitalization. Further, the APHINITY study results did not support "contin[uing] to grow this franchise [the HER2 franchise] through biosimilar competition" because due to the dismal results of the APHINITY study doctors would not be widely prescribing Perjeta in an adjuvant setting, and revenues from the Perjeta/Herceptin combination would not offset revenues lost from biosimilar competition or help Roche continue to grow the HER2 franchise. For the same reasons, the study outcome was not "terrific news." Additionally, Defendant O'Day's statement that one medicine in combination has been able to improve the standard of care *systematically* across metastatic, neoadjuvant and now adjuvant was knowingly highly false and misleading because it implied that the study results supported making Herceptin plus Perjeta the new standard of care which it did not. O'Day was in possession of the study data which demonstrated that the improvement applied to one small subgroup in the study, not to the entire study population, and therefore there would be no "systematic" change in treatment of HER2-positive early breast cancer in the adjuvant setting.

145. Even if O'Day's statement that the APHINITY trial would "improve the standard of care systematically" is considered an opinion statement, O'Day lacked a reasonable basis for making the statement because he was aware of facts (i.e. the study results) demonstrating that the study results did not show that the

addition of Perjeta improved the standard of care "systematically" because: (1) the marginal 0.9% benefit from adding Perjeta to Herceptin meant that it did not improve the standard of care "systematically" and (2) the benefit which inured to one study subgroup meant that the improvement was not "systematic" but was instead isolated to that one subgroup.

146. Further, Defendant O'Day's statement that we are "looking forward to presenting the results to you at ASCO" implies that the results were positive and would be well-received by clinicians and investors. In reality, Defendant O'Day was well aware that the study results did not meet clinicians,' analysts' and investors' expectations for success and that when the results were presented at ASCO the response would be overwhelmingly negative.

147. On the 1Q 2017 Investor Conference Call Defendant O'Day fielded questions from analysts about the APHINITY study:

> Q: I know you don't want to say much on APHINITY ahead of ASCO, ***but hoping I can get your level of confidence from the robustness of the results in another way because, as you know, there's lots of debate about the magnitude and the benefit and that sort of thing***. So consensus currently models peak Perjeta sales of around CHF[8] 4.5 billion. As a reference of course, Herceptin currently falls around CHF 7 billion a year. I'm hoping you can give us some indication whether you think those out-year numbers seem reachable or could they be too high or low.

[8] "CHF" indicates Swiss Francs. 1 CHF equals approximately $1.07, presently. During the Class Period on average, 1 CHF was equal to approximately $1.03.

148. O'Day responded, assuring investors that while the full results could not be divulged until the ACSO conference, the results were clinically meaningful and demonstrated a clinically meaningful reduction in the recurrence of disease in patients treated with the Perjeta/Herceptin combination:

> So yeah, you're right. I mean, obviously for the sake of the cooperative group, for our sake, for the sake of ASCO, we have to really wait until ASCO to get into the details. But suffice it to say that we think this is the data we filed, where we think ***the data shows a reduction in risk recurrence in invasive breast cancer and we think they're clinically meaningful.*** I think that's about as much as I'm going to open the envelope on today until you see the additional data. (Emphasis added).

149. Defendant O'Day's above-statement that the "data shows a reduction in risk recurrence in invasive breast cancer" that is "clinically meaningful" was materially false and misleading because: a) the data barely showed a statistically significant reduction in risk recurrence in invasive breast cancer, let alone a reduction in risk that was clinically significant; b) the overall difference in study patients treated with Perjeta compared to those treated with placebo was only marginal; c) the data showed that only one subgroup within the study showed *any* improvement in the rate of cancer recurrence; d) the improvement in patients given Perjeta was marginal overall and would not be considered clinically significant by the medical community and prescribers; and e) the study patients treated with Perjeta experienced higher rates of diarrhea and other adverse events.

Additional Motive Allegations

150. Defendants issued the March 2 press release despite knowing that the data from the APHINITY study did not show a clinically significant or a clinically meaningful benefit from adding Perjeta in an adjuvant setting and that the APHINITY study results meant that a Perjeta/Herceptin combination would not become the new standard of care and would not be widely prescribed by clinicians. By announcing positive results for the APHINITY study, Roche made investors believe that Perjeta in an adjuvant setting would be widely used and Roche would protect sales of Herceptin against biosimilars and therefore earn substantial profits from the use of Perjeta in an adjuvant setting and that the value of its stock would rise accordingly. Defendants therefore artificially inflated the price of the Company's securities so that they could earn a quick profit by selling over $13.1 million of Roche shares before having to announce the true results from the APHINITY study at the ASCO conference.

151. Roche's undisclosed payments of millions of dollars to Dr. Jose Baselga, a study collaborator and author who touted the Perjeta/Herceptin combination despite the dismal study results additionally supports an inference of scienter.

APPLICABILITY OF PRESUMPTION OF RELIANCE:

Fraud-on-the-Market Doctrine

1. Plaintiffs are entitled to rely, and will rely, upon the presumption of reliance established by the fraud-on-the-market doctrine in that:

a. Defendants made public misrepresentations or failed to disclose material facts during the Class Period;

b. the omissions and misrepresentations were material;

c. Roche securities are traded in efficient markets;

d. the misrepresentations and omissions alleged would tend to induce a reasonable investor to misjudge the value of Roche's securities; and

e. Plaintiff and members of the Class purchased, acquired and/or sold Roche securities between the time the Defendants failed to disclose or misrepresented material facts and the time the true facts were disclosed, without knowledge of the omitted or misrepresented facts.

152. At all relevant times, the market for Roche ADS was an efficient market for the following reasons, among others:

- Roche's ADS met the requirements for listing, and were listed and actively traded on the OTCQX, an highly efficient and automated market;

- Roche shares were also listed on the SIX Swiss stock exchange in Europe providing very deep trading markets;

- During the Class Period, the average weekly trading volume for Roche ADS on the OTCQX Market was 5,517,977 shares, which represents approximately 1% of ADS available for sale during the Class Period permitting a strong presumption of reliance;

- At least 12 stock market analysts followed Roche and wrote a total of at least 50 reports on Roche during the Class Period. Analysts covering Roche included Morgan Stanley, JP Morgan, Morningstar, Société Générale, Deutsche Bank, UBS, Credit Suisse, Jeffries and Liberium;

- Roche regularly communicated with public investors via established market communication mechanisms, including through regular disseminations of press releases on the national circuits of major newswire services and through other wide-ranging public disclosures, such as communications with the financial press and other similar reporting services;

- More than 25 member firms were active market-makers in Roche ADS at all times during the Class Period;

- During the Class Period Roche was eligible for S-3 registration (or F-3 in Roche's case as a foreign private issuer), with a tradeable float in excess of $75 million;

- Roche's market capitalization exceeded $2 billion on all days during the Class Period;

- Unexpected material news about Roche was rapidly reflected and incorporated into the Company's ADS price during the Class Period. For example, when Defendants issued the misrepresentation about the APHINITY study on March 2, 2017, Roche's share price spiked up a material amount, and when Roche disclosed the truth about the APHINITY study results on June 5, 2017, its share price immediately declined a material amount.

153. As a result of the foregoing, the market for Roche promptly digested current information regarding Roche from all publicly available sources and reflected such information in Roche's ADS price. Under these circumstances, all purchasers of Roche ADS during the Class Period suffered similar injury through

their purchase of Roche ADS at artificially inflated prices, and a presumption of reliance applies.

Affiliated Ute

154. Neither Plaintiffs nor the Class need prove reliance – either individually or as a class because under the circumstances of this case, positive proof of reliance is not a prerequisite to recovery, pursuant to ruling of the United States Supreme Court in *Affiliated Ute Citizens of Utah v. United States*, 406 U.S. 128 (1972). All that is necessary is that the facts withheld be material in the sense that a reasonable investor might have considered the omitted information important in deciding whether to buy or sell the subject security.

PLAINTIFFS' CLASS ACTION ALLEGATIONS

155. Plaintiff brings this action as a class action pursuant to Federal Rules of Civil Procedure 23(a) and (b)(3) on behalf of a Class, consisting of all persons who purchased Roche ADS during the Class Period and who were damaged thereby. Excluded from the Class are Defendants, the officers and directors of the Company at all relevant times, members of their immediate families and their legal representatives, heirs, successors or assigns and any entity in which defendants have or had a controlling interest.

156. The members of the Class are so numerous that joinder of all members is impracticable. Throughout the Class Period, Roche's ADS were

actively traded on the OTCQX Marketplace. While the exact number of Class members is unknown to Plaintiffs at this time and can only be ascertained through appropriate discovery, Plaintiffs believe that there are at least hundreds of members in the proposed Class. Members of the Class may be identified from records maintained by Roche or its transfer agent and may be notified of the pendency of this action by mail, using a form of notice customarily used in securities class actions.

157. Plaintiffs' claims are typical of the claims of the members of the Class, as all members of the Class are similarly affected by Defendants' wrongful conduct in violation of federal law that is complained of herein.

158. Plaintiffs will fairly and adequately protect the interests of the members of the Class and have retained counsel competent and experienced in class and securities litigation.

159. Common questions of law and fact exist as to all members of the Class and predominate over any questions solely affecting individual members of the Class. Among the questions of law and fact common to the Class are:

(a) whether the federal securities laws were violated by Defendants' acts as alleged herein;

(b) whether statements made by Defendants to the investing public during the Class Period misrepresented material facts about the business, operations and management of Roche;

(c) whether the Individual Defendants caused Roche to issue false and misleading statements during the Class Period;

(d) to what extent the members of the Class have sustained damages and the proper measure of damages.

160. A class action is superior to all other available methods for the fair and efficient adjudication of this controversy since joinder of all members is impracticable. Furthermore, as the damages suffered by individual Class members may be relatively small, the expense and burden of individual litigation make it impossible for members of the Class to redress individually the wrongs done to them. There will be no difficulty in the management of this action as a class action.

COUNT I

Violation of Section 10(b) of The Exchange Act and Rule 10b-5 Against All Defendants

161. Plaintiffs repeat and reallege each and every allegation contained above as if fully set forth herein.

162. This Count is asserted against the Company and the Individual Defendants and is based upon Section 10(b) of the Exchange Act, 15 U.S.C. § 78j(b), and Rule 10b-5 promulgated thereunder by the SEC.

163. During the Class Period, the Company and the Individual Defendants, individually and in concert, directly or indirectly, disseminated or approved the false statements specified above, which they knew or deliberately disregarded were misleading in that they contained misrepresentations and failed to disclose material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading.

164. The Company and the Individual Defendants violated §10(b) of the 1934 Act and Rule 10b-5 in that they: employed devices, schemes and artifices to defraud; made untrue statements of material facts or omitted to state material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; or engaged in acts, practices and a course of business that operated as a fraud or deceit upon plaintiff and others similarly situated in connection with their purchases of the Company's securities during the Class Period.

165. The Company and the Individual Defendants acted with scienter in that they knew that the public documents and statements issued or disseminated in the name of the Company were materially false and misleading; knew that such

statements or documents would be issued or disseminated to the investing public; and knowingly and substantially participated, or acquiesced in the issuance or dissemination of such statements or documents as primary violations of the securities laws. These defendants by virtue of their receipt of information reflecting the true facts of the Company, their control over, and/or receipt and/or modification of the Company's allegedly materially misleading statements, and/or their associations with the Company which made them privy to confidential proprietary information concerning the Company, participated in the fraudulent scheme alleged herein.

166. Individual Defendants, who are the senior officers and/or directors of the Company, had actual knowledge of the material omissions and/or the falsity of the material statements set forth above, and intended to deceive Plaintiffs and the other members of the Class, or, in the alternative, acted with reckless disregard for the truth when they failed to ascertain and disclose the true facts in the statements made by them or other personnel of the Company to members of the investing public, including Plaintiffs and the Class.

167. As a result of the foregoing, the market price of the Company's ADS were artificially inflated during the Class Period. In ignorance of the falsity of the Company's and the Individual Defendants' statements, Plaintiffs and the other members of the Class relied on the statements described above and/or the integrity

of the market price of the Company's securities during the Class Period in purchasing the Company's securities at prices that were artificially inflated as a result of the Company's and the Individual Defendants' false and misleading statements.

168. Had Plaintiffs and the other members of the Class been aware that the market price of the Company's securities had been artificially and falsely inflated by the Company's and the Individual Defendants' misleading statements and by the material adverse information which the Company and the Individual Defendants did not disclose, they would not have purchased the Company's securities at the artificially inflated prices that they did, or at all.

169. As a result of the wrongful conduct alleged herein, Plaintiffs and other members of the Class have suffered damages in an amount to be established at trial.

170. By reason of the foregoing, the Company and the Individual Defendants have violated Section 10(b) of the 1934 Act and Rule 10b-5 promulgated thereunder and are liable to Plaintiffs and the other members of the Class for substantial damages which they suffered in connection with their purchases of the Company's securities during the Class Period.

COUNT II

Violation of Section 20(a) of the Exchange Act Against The Individual Defendants

171. Plaintiffs repeat and reallege each and every allegation contained in the foregoing paragraphs as if fully set forth herein.

172. During the Class Period, the Individual Defendants participated in the operation and management of the Company, and conducted and participated, directly and indirectly, in the conduct of the Company's business affairs. Because of their senior positions, they knew the adverse non-public information regarding the Company's business practices.

173. As officers and/or directors of a publicly owned company, the Individual Defendants had a duty to disseminate accurate and truthful information with respect to the Company's financial condition and results of operations, and to correct promptly any public statements issued by the Company which had become materially false or misleading.

174. Because of their positions of control and authority as senior officers, the Individual Defendants were able to, and did, control the contents of the various reports, press releases and public filings which the Company disseminated in the marketplace during the Class Period. Throughout the Class Period, the Individual Defendants exercised their power and authority to cause the Company to engage in the wrongful acts complained of herein. The Individual Defendants therefore, were "controlling persons" of the Company within the meaning of Section 20(a) of the

Exchange Act. In this capacity, they participated in the unlawful conduct alleged which artificially inflated the market price of the Company's securities.

175. Each of the Individual Defendants, therefore, acted as a controlling person of the Company. By reason of their senior management positions and/or being directors of the Company, each of the Individual Defendants had the power to direct the actions of, and exercised the same to cause, the Company to engage in the unlawful acts and conduct complained of herein. Each of the Individual Defendants exercised control over the general operations of the Company and possessed the power to control the specific activities which comprise the primary violations about which Plaintiffs and the other members of the Class complaint.

176. By reason of the above conduct, the Individual Defendants are liable pursuant to Section 20(a) of the Exchange Act for the violations committed by the Company.

COUNT III

Violation of Section §20(A) of the Exchange Act Against the Individual Defendants (Insider Trading)

177. Plaintiffs repeat and reallege each and every allegation contained above as if fully set forth herein.

178. This claim is brought against Individual Defendants Hippe, Schwan, O'Day and Keller under §20A of the Exchange Act, 15 U.S.C. §78t-1 on behalf of

the §20A Subclass. Between March 3, 2017 and May 10, 2017 the Individual Defendants members of Roche's Corporate Executive Committee board sold CHF 12,796,757 (approximately $13,152,849) worth of Roche securities. Lead Plaintiff Kevin Gardeck purchased 5,750 shares of Roche ADS at $32.16 and 4,500 shares of Roche ADS at $32.23 on March 28, 2017 which is within a day of insider sales.

179. As stated herein, the Individual Defendants were aware of and/or recklessly disregarded the true results of the APHINITY study and the Company's true financial condition.

180. The Individual Defendants had access to Roche's material, nonpublic and highly confidential information concerning the data and results from the APHINITY study prior to the issuance of Roche's March 2 press release and the knowledge that the March 2 press release and statements made on Roche's investor calls concerning the APHINITY trial results were materially misstated during the Class Period. By virtue of the Individual Defendants' receipt thereof, the Individual Defendants were duty bound not to benefit therefrom and either disclose the true facts about the study results or refrain from trading Roche securities, a duty which they violated by selling their shares at inflated prices.

181. The Individual Defendants thereby violated Section 10(b) of the Exchange Act, 15 U.S.C. § 78j(b), and SEC Rule 10b-5, 17 C.F.R. § 240.10b-5.

182. The measure of damages for trading while in possession of material nonpublic information under Section 20A of the Exchange Act, 15 U.S.C. § 78t-1, is the disgorgement of profits gained and losses avoided by such trading.

183. Plaintiff Gardeck and the Subclass of investors who likewise purchased Roche shares contemporaneously with the Individual Defendants' March 3, 2017 through May 10, 2017 insider sales are entitled to disgorgement of the amounts by which the Individual Defendants profited from such trades.

184. By virtue of the foregoing, the Individual Defendants are liable for violations of Section 20A of the Exchange Act, 15 U.S.C. § 78t-1.

185. This action was filed within two years of discovery of the fraud and within five years of Plaintiff's purchases of securities giving rise to the cause of action.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs demand judgment against Defendants as follows:

A. Determining that the instant action may be maintained as a class action under Rule 23 of the Federal Rules of Civil Procedure, and certifying Plaintiff as the Class representative;

B. Requiring Defendants to pay damages sustained by Plaintiffs and the Class by reason of the acts and transactions alleged herein;

C. Awarding Plaintiffs and the other members of the Class prejudgment and post-judgment interest, as well as their reasonable attorneys' fees, expert fees and other costs; and

D. Awarding such other and further relief as this Court may deem just and proper.

DEMAND FOR TRIAL BY JURY

Plaintiffs hereby demand a trial by jury.

Dated: October 15, 2018

Respectfully submitted,

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EXHIBIT 1

Exchange Regulation

LISTING RULES

Table of contents

Listing Rules
(Listing Rules, LR)

Dated 4 November 2016

I. GENERAL PROVISIONS

A. PURPOSE AND APPLICABILITY

Art. 1
Purpose

The purpose of the Listing Rules ("LR") is to provide issuers with access to exchange trading that is as free and equal as possible, and to ensure transparency for investors with regard to issuer quality and the characteristics of individual securities.

Art. 2
Applicability

[1] The Listing Rules contain general provisions and govern the listing of equity securities on SIX Swiss Exchange Ltd ("SIX Swiss Exchange").

[2] The listing of other products (e.g. bonds, derivatives, Exchange Traded Products) is governed by Additional Rules.

See also:

- Additional Rules Derivatives (ARD)
- Additional Rules Bonds (ARB)
- Additional Rules Exchange Traded Products (ARETP)

B. POWERS OF THE REGULATORY BOARD

Art. 3
Regulatory standards and decision-making authority

[1] Pursuant to Art. 35 of the Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (FMIA), the Regulatory Board decides on the admission (including provisional admission) of securities to trading, as well as the allocation of securities to the individual SIX Swiss Exchange standards for equity and debt securities.

[2] The standard for equity securities is divided into the following regulatory standards:

– International Reporting Standard;
– Swiss Reporting Standard;
– Standard for Investment Companies;

– Standard for Real Estate Companies;
– Standard for Depository Receipts;
– Standard for Collective Investment Schemes.

[3] The standard for debt securities is divided into the following regulatory standards:

– Standard for Bonds;
– Standard for Derivatives;
– Standard for Exchange Traded Products.

[4] The Regulatory Board may set criteria according to which certain securities or categories of securities are to be traded on stock exchanges that SIX Swiss Exchange arranges in conjunction with domestic or foreign third parties.

[5] The Regulatory Board will issue a Directive determining which financial reporting standards may be applied within the individual regulatory standards.

[6] It is the most senior supervisory body ensuring that issuers fulfil their obligations during listing.

[7] It rules on the suspension of trading, as well as the termination and cancellation of listing, provided such steps are not intended as sanctions.

[8] It may issue regulations on the use by issuers of the electronic publication platform referred to in Art. 25 para. 1 of the Swiss Financial Market Supervisory Authority Ordinance of 3 December 2015 on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (FMIO-FINMA).

[9] It may issue provisions on disclosures, as well as changes to the rights associated with the securities and with the corporate calendar and, specifically, require issuers to use a SIX Swiss Exchange electronic platform to transmit information.

[10] The Regulatory Board will take the interests of market participants, investors and issuers into account in its activities.

See also:

- Regulatory Bodies Organisation Rules (RBOR)
- Federal Act of 19 June 2015 on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (Financial Market Infrastructure Act, FMIA)
- Swiss Financial Market Supervisory Authority Ordinance of 3 December 2015 on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (FINMA Financial Market Infrastructure Ordinance, FMIO-FINMA)
- Directive Delisting (DD)
- Directive Electronic Reporting and Publication Platforms (DERP)
- Directive Regular Reporting Obligations (DRRO)
- Directive Financial Reporting (DFR)
- Additional Rules Bonds (ARB)
- Additional Rules Derivatives (ARD)
- Additional Rules Exchange Traded Products (ARETP)

Art. 4
Implementing provisions

The Regulatory Board may issue Directives governing the details of how the Listing Rules and Additional Rules are to be applied.

See also:

- Regulatory Bodies Organisation Rules (RBOR)

Art. 5
Circulars and Communiqués

[1] The Regulatory Board and SIX Exchange Regulation may explain their practice by means of Circulars.

[2] The entry into force of new provisions or amendments to them, as well as the publication of individual decisions or fundamental changes to practice, are announced in the form of Regulatory Board and SIX Exchange Regulation Communiqués.

Art. 6
Duties to provide information

[1] In fulfilling their tasks, the Regulatory Board and the SIX Exchange Regulation Division may demand that issuers and/or guarantors provide all the information that is necessary for investors to assess the characteristics of the securities and the quality of the issuer and/or the guarantor, to monitor compliance with the rules and regulations of the Regulatory Board, and to investigate any breaches. Issuers and/or guarantors may be required to present relevant documentation to this end.

[2] When reviewing listing applications, the Regulatory Board and the SIX Exchange Regulation Division may, in particular, demand explanations and further information, as well as additional documentation. Having informed the issuer accordingly, it may also obtain legal opinions and statements from third parties. The costs that are incurred may be charged to the applicant.

[3] The Regulatory Board and the SIX Exchange Regulation Division may demand that the issuer and/or guarantor publish certain information.

[4] If the issuer and/or guarantor does not make a disclosure that has been required of it by the Regulatory Board or the SIX Exchange Regulation Division, the Regulatory Board or the SIX Exchange Regulation Division may, having granted a legal hearing, publish the information itself if it is able to do so.

[5] Those concerned are obliged to cooperate.

Art. 7
Exemptions

[1] The Regulatory Board may authorise exemptions from certain provisions of these Listing Rules, provided this is not against the interests of the investors or the stock exchange, and provided the applicant can provide evidence that the purpose of the provisions in question can be served satisfactorily by other means.

[2] Requirements and conditions may be attached to the authorisation of an exemption.

C. LANGUAGES

Art. 8
Language

The documents that must be submitted in connection with the provisions of the Listing Rules and their implementing provisions may be produced and published in German, French, Italian or English.

D. OUTSOURCING

Art. 8a
Outsourcing

SIX Swiss Exchange is authorised to outsource data processing and other services to group companies of SIX Group AG, as well as to external third parties in Switzerland and abroad. This concerns, in particular, data archiving, the management of core data, IT and backoffice functions, activities designed to guarantee fair, efficient and orderly trading, and the operation of matching and market data distribution systems. Where data is transmitted to group companies or to external third parties as part of an outsourcing arrangement, all services providers will be subject to comprehensive confidentiality provisions.

II. LISTING

A. LISTING REQUIREMENTS

Art. 9
Principle

[1] The applicant (Art. 43) must provide evidence that the following requirements are met with regard to the issuer and the securities.

[2] Where in the interests of the public, the Regulatory Board may reject a listing application even if the listing requirements have been fulfilled.

Art. 9a
Standard for Equity Securities

[1] The requirements for issuers and securities under the International Reporting Standard and the Swiss Reporting Standard are laid down in Arts. 10 to 26.

[2] The requirements for issuers and securities under the Standard for Real Estate Companies, Standard for Investment Companies, Standard for Depositary Receipts and Standard for Collective Investment Schemes are laid down in Sections A, B, D and E of Title VII.

1. Requirements for the issuer

Art. 10
Foundations in company law

The establishment, the articles of association or the deed of partnership of the issuer must comply with the national law to which the issuer is subject.

Art. 11
Duration

[1] The issuer must have existed as a company for at least three years.

[2] Exemptions, for young companies specifically, are laid down in a Directive.

See also:

- Directive Track Record (DTR)

Art. 12
Annual financial statements

The issuer must have produced annual financial statements that comply with the financial reporting standards applicable to the issuer for the three full financial years preceding the listing application.

See also:

- Directive Financial Reporting (DFR)
- Directive Complex Financial History (DCFH)

Art. 13
Auditors

[1] By appointing auditors, the issuer fulfils the requirements set out in Arts. 7 and 8 of the Federal Act on the Admission and Oversight of Auditors (AOA).

[2] The issuer must report any and all changes concerning its auditors immediately to SIX Exchange Regulation.

See also:

- Directive Regular Reporting Obligations (DRRO)
- Federal Act of 16 December 2005 on the Admission and Oversight of Auditors (Audit Oversight Act, AOA) (in German)

Art. 14
Audit report

The auditors appointed in accordance with Art. 13 must state in their report whether or not the issuer's accounts have been drawn up in compliance with the applied financial reporting standard.

See also:

- Directive Financial Reporting (DFR)

Art. 15
Capital resources

[1] On the first day of trading, the issuer's reported equity capital must be at least CHF 2.5 million, in accordance with the financial reporting standard used in the listing prospectus.

[2] If the issuer is the parent company of a group, the above requirement refers to consolidated reported equity capital.

Art. 16
Further requirements

The Regulatory Board may determine further requirements for issuers where justified by the nature of the business or by the securities that are to be listed.

2. Requirements for securities

Art. 17
Legal validity

[1] At the time of listing, the securities must have been issued in accordance with the law to which the issuer is subject and must satisfy the provisions that apply to those securities. The form of those securities must also comply with the law that applies to both the securities and the issuer.

[2] The listing of conditional capital remains reserved.

See also:

- Directive Form of Securities (DFS)

Art. 18
Listing by class

The listing must comprise all of the issued securities in the same category.

Art. 19
Free float

[1] The securities must have an adequate free float at the time of listing.

[2] The free float is regarded as adequate if at least 20% of all of the issuer's outstanding securities in the same category are in public ownership, and the capitalisation of those securities in public ownership amounts to at least CHF 25 million.

See also:

- Directive Distribution Equity Securities (DDES)

Art. 20
Increase in the number of securities already listed

The provisions which apply to the free float do not apply in the case of a simple increase in the number of securities that are already listed.

Art. 21
Tradability

[1] The proper trading of securities on the stock exchange must be ensured and there must be rules on establishing legal ownership.

[2] Securities that are subject to approval or to restrictions with respect to potential purchasers may be listed if their tradability is guaranteed and there is no risk to the fulfilment of the transaction.

Art. 22
Denominations

The denominations forming the total value of a security must enable an exchange transaction in the amount of one round lot, in accordance with the applicable provisions of that stock exchange to which the securities are admitted to trading.

See also:

- SIX Swiss Exchange Guides

Art. 23
Clearing and settlement

The issuer must ensure that transactions can be cleared and settled via the settlement systems that are permitted by SIX Swiss Exchange.

See also:

- Rule Book of SIX Swiss Exchange

Art. 24
Paying agents, exercise agents and corporate actions

[1] The issuer must ensure that services pertaining to dividends, as well as all other corporate actions, including the receipt and handling of exercise notices, are provided in Switzerland.

[2] The issuer may assign the activities referred to in Art. 24 para. 1 to a bank or a securities dealer which has the necessary professional and technical capabilities available in Switzerland, or to the Swiss National Bank. The bank or securities dealer must be subject to the supervision of the Swiss Financial Market Supervisory Authority (FINMA).

Art. 25
Listing in the home country

Securities from an issuer that has its registered office in a third state, and that are not listed on a stock exchange either in that state or in the state in which the majority of shares are held may be listed only if there is confirmation that the absence of listings in these states is not due to non-fulfilment of investor protection regulations.

See also:

- Directive Foreign Companies (DFC)

Art. 26
Continued fulfilment of listing requirements

The listing requirements laid down in Arts. 10, 13, 16, 18, 21, 22, 23 and 24 must continue to be fulfilled for the entire duration of the listing.

B. OBLIGATIONS WITH RESPECT TO LISTING

1. Listing prospectus

Art. 27
Principle

[1] In order to be listed, the issuer must publish a listing prospectus which provides sufficient information for competent investors to reach an informed assessment of the assets and liabilities, financial position, profits and losses and prospects of the issuer, as well as of the rights attached to the securities.

[2] Specific mention must be made of any special risks.

See also:

- Scheme A
- Scheme B
- Scheme C
- Scheme D
- Scheme E
- Scheme F
- Scheme G
- Directive Financial Reporting (DFR)
- Directive Complex Financial History (DCFH)

Art. 28
Content of the listing prospectus

The listing prospectus must contain the information prescribed in Scheme A. Scheme A constitutes an integral part of the Listing Rules.

See also:

- Scheme A

Art. 29
Form of the listing prospectus

[1] As a general rule, the listing prospectus must be a single document.

[2] If the issue price and/or issue volume is/are not yet known when the listing prospectus is submitted, it may also be produced as a two-part document, with a supplement to the first part published once the missing information is known. These two parts then constitute the final listing prospectus.

[3] The production of a two-part listing prospectus is conditional upon the following:

1. the listing prospectus and the "Official Notice" must at least state the criteria and/or conditions to be used to establish the missing information;
2. the "Official Notice" must indicate that the missing information will be published no later than the first day of trading. The form of publication must also be stated;
3. the supplement must be provided to interested investors free of charge along with the listing prospectus. The "Official Notice" must also state this fact;
4. the listing prospectus must be referred to as the "listing prospectus" and not as the "provisional listing prospectus", as the publication of the supplement results automatically in the final listing prospectus;
5. in addition to information on the issue price and issue volume, the supplement must also state that the final listing prospectus comprises the listing prospectus together with its supplement.

[4] The supplement must be published no later than the first day of trading. It must be published in the same way as the listing prospectus.

Art. 30
Form of publication

[1] The listing prospectus must be published and available in one of the following forms for 12 months following the listing of the equity securities, for their entire term, or until expiry in the case of other types of security:

1. made available free of charge and delivered in printed booklet or bound form at the issuer's head office and at those financial institutions that are placing the securities;
2. electronic publication on the issuer's website and possibly also on the websites of those financial institutions that are placing the securities. It must be possible to access these documents free of charge.

[2] Where a listing prospectus comprises two parts and/or incorporates information by reference, the documents and information making up the listing prospectus may be published separately, provided they are available free of charge and delivered to investors in printed form, or downloaded electronically free of charge. Each document must indicate where the other individual constituent documents of the full listing prospectus, published earlier or simultaneously, may be obtained.

[3] The wording and presentation of the published listing prospectus must always correspond to the original version of the prospectus in question, as approved by the Regulatory Board.

[4] The Regulatory Board reserves the right to make approved and published listing prospectuses, as well as other issuer and security-related information, available in suitable form via an electronic system.

Art. 31
Time of publication

[1] The listing prospectus must be published no later than the day of listing.

[2] If significant changes are made to the information contained in the listing prospectus or equivalent information document pursuant to Art. 33 point 1 between the date on which the listing prospectus or equivalent information document is published and the day of listing, investors must be notified of such changes by means of an "Official Notice".

[3] Para. 2 is not applicable to securities which have been admitted provisionally to trading.

Art. 32
Presentation

[1] The listing prospectus must be presented in such a way that enables a competent investor to assess the quality of the issuer and the characteristics of the securities (Arts. 1 and 27).

[2] Within the framework of Art. 32 para. 1, the issuer is free to choose how the listing prospectus is presented. The Regulatory Board may nonetheless demand that important information for investors is placed prominently for emphasis.

[3] The listing prospectus must not contain inflammatory or promissory statements.

Art. 33
Exemption from the obligation to produce a listing prospectus

Exemptions from the requirement to draw up a listing prospectus may be made in the following circumstances:

1. if a listing prospectus or an information document deemed under the Listing Rules to be equivalent to a listing prospectus has already been published with regard to the listing of the securities in question. This prospectus or information document must comply with the general principles for prospectuses set out in Arts. 27 et seq. and contain the information required under Art. 28. It must also have been published no more than 12 months previously; or
2. for the listing of securities that:
   a. calculated over a 12-month period, account for less than 10% of securities of the same class that have already been listed;
   b. are issued in exchange for securities of the same class that are already listed on SIX Swiss Exchange, provided the issue of these securities is not associated with a capital increase on the part of the issuer;
   c. are issued in connection with the conversion or exchange of other securities, or as a result of the exercise of rights associated with other securities, provided the securities in question are of the same class as the securities that are already listed;
   d. are offered in connection with a takeover by means of an exchange offer, provided that a document containing information which is regarded by the Regulatory Board as being equivalent to that of a listing prospectus is available;
   e. are offered, allotted or are to be allotted in connection with a merger, provided that a document containing information which is regarded by the Regulatory Board as being equivalent to that of a prospectus is available;
   f. are offered, allotted or are to be allotted free of charge to existing holders of such securities, as well as dividends paid out in the form of securities of the same class as the securities in respect of which such dividends are paid, provided that the securities are of the same class as those that are already listed, and that a document is containing informa-

tion on the number and type of securities, and the reasons for and details of the offer, is made available;

g. are offered, allotted or are to be allotted by the issuer or an affiliated company to current or former members of the board of directors or executive board, or to employees, provided that the securities are of the same class as those that are already listed, and that a document containing information on the number and type of securities, and the reasons for and details of the offer is made available.

Art. 34 Abridgement of the listing prospectus

[1] The listing prospectus may be abridged if securities from the same issuer are already listed, and if the new securities are offered to holders on the basis of ordinary or preferential subscription rights, either free of charge or against payment.

[2] A listing prospectus may not be abridged if the Directive on the Presentation of a Complex Financial History in the Listing Prospectus is applicable.

[3] The information marked "*" in the relevant Scheme may be omitted to abridge the listing prospectus.

See also:

- Directive Complex Financial History (DCFH)

Art. 35 Incorporation by reference

[1] Information may be included in the listing prospectus in the form of a reference to one or more previously or simultaneously published documents ("reference documents").

[2] The issuer must ensure that these reference documents contain the latest information at the issuer's disposal.

[3] If reference is made to a reference document which, as at the date of the listing prospectus, no longer reflects the latest information or most recent status with regard to significant points, this fact must be indicated in the listing prospectus and the updated information must be provided. If reference is made to only a specific portion of a reference document, then the listing prospectus must contain a corresponding note as to which portions are of relevance to investors.

[4] Reference may be made to the following reference documents:

1. required periodic interim financial statements;
2. auditors' reports and annual financial statements that have been drawn up in compliance with applicable financial reporting standards;

3. documents that have been produced in association with a specific transaction, such as a merger or spin-off;
4. documents and listing prospectuses that have previously been approved by the Regulatory Board and published, provided they are no more than 12 months old when the listing application is submitted;
5. information that has been sent to securities holders.

[5] Reference documents that are to be incorporated by reference in the listing prospectus must be submitted for approval by the Regulatory Board at the same time as the listing prospectus.

[6] The reference document must be available promptly, without restriction, without the provision of any proof of interest, and free of charge, together with the current listing prospectus. The issuer must make all organisational arrangements necessary to ensure that these documents can be requested as hard copies from a central location or accessed electronically. Furthermore, the listing prospectus must refer in a prominent place to the reference document, and must also state where this reference document may be obtained.

Art. 36
Exemptions in respect of specific information

The Regulatory Board may permit certain information to be omitted from the listing prospectus, if it considers that:

1. disclosure would be seriously detrimental to the issuer, provided that the omission would not mislead investors with regard to facts and circumstances that are essential to an informed assessment of the quality of the issuer and the characteristics of the securities in question; or
2. the information in question is of minor importance only, and will have no bearing on the assessment of the assets and liabilities, financial position, profits and losses and prospects of the issuer; or
3. the securities that are to be listed are traded on another stock exchange that is supervised by FINMA, and the issuer's periodic reporting has complied with the financial reporting requirements laid down in Arts. 49 et seq. for the last three years.

2. "Official Notice"

Art. 37
Principle (cancelled)

(cancelled)

Art. 38
Form of publication (cancelled)

(cancelled)

Art. 39
Time of publication (cancelled)

(cancelled)

Art. 40
Content of the listing notice (cancelled)

(cancelled)

Art. 40a
"Official Notice"

[1] The issuer must publish an "Official Notice".

[2] The purpose of the "Official Notice" is to draw investors' attention to:

1. the listing or transaction for which an application has been submitted;
2. the options for obtaining the listing prospectus free of charge (incl. details of where it is available in printed form and/or where it can be accessed electronically);
3. any supplement to the listing prospectus pursuant to Art. 29;
4. any significant changes pursuant to Art. 31 para. 2.

See also:

- Directive Procedures Equity Securities (DPES)

Art. 40b
Time of publication

[1] The "Official Notice" must be published no later than the start of trading on the day of listing.

[2] An "Official Notice" pursuant to Art. 31 para. 2 must be published no later than 08.00 a.m. Central European Time (CET) on the day of listing.

3. Further disclosure obligations

Art. 41
Availability of information documents

The Regulatory Board may demand that information documents that affect the position of investors (e.g. expert reports, trust deeds and important contracts) are made available for inspection by investors in a form described in Art. 30.

C. LISTING PROCEDURE

Art. 42
Listing application

An application must be submitted before securities may be listed on SIX Swiss Exchange.

Art. 43
Submitting a listing application

[1] The listing application must be submitted by a recognised representative (applicant) in writing to SIX Exchange Regulation.

[2] Anyone who can provide evidence that they possess the professional knowledge required by the Regulatory Board may submit an application to the latter for registration as a recognised representative.

See also:

- Directive Procedures Equity Securities (DPES)
- Directive Procedures Debt Securities (DPDS)

Art. 44
Content of the listing application

[1] The listing application must contain a short description of the securities and a request regarding the planned first trading day, as well as a reference to the enclosures to the application that are required by the Regulatory Board.

[2] If certain listing requirements are not met, the listing application must contain a well-founded request for an exemption.

See also:

- Directive Procedures Equity Securities (DPES)
- Directive Procedures Debt Securities (DPDS)
- Directive Procedures Exchange Traded Products (DPETP)

Art. 45
Issuer declaration

Prior to the planned listing date, the issuer must submit a duly signed declaration stating that:

1. its responsible bodies are in agreement with the listing;
2. the listing prospectus and "Official Notice" (where they are required) are complete pursuant to the Listing Rules;
3. there has been no material deterioration in the issuer's assets and liabilities, financial position, profits and losses and business prospects since the listing prospectus was published;
4. the issuer has read and acknowledges the Listing Rules, with their Additional Rules and the corresponding implementing provisions, as well as the Rules of Procedure and sanction regulations of SIX Swiss Exchange, and that it recognises them expressly in the form of the Declaration of Consent. The issuer recognises the Board of Arbitration determined by SIX Swiss Exchange, and expressly agrees to be bound by any arbitration agreement. The issuer further recognises that continued listing is conditional upon its agreeing to be bound by the version of the legal foundations that is in force at any given time;

5. the issuer will pay the listing charges.

See also:

- Declaration of Consent

Art. 46
Review of listing application

The Regulatory Board will review the listing application on the basis of the documents that have been submitted.

Art. 47
Decision

[1] The Regulatory Board will approve the listing application if it fulfils the requirements laid down in these Listing Rules. Approval may be subject to further requirements and/or conditions.

[2] If the requirements are not fulfilled, the Regulatory Board will refuse the application either finally or pending a renewed application in which all conditions are met.

[3] Listing does not constitute a value judgement about the securities or about the issuer.

[4] The decision of the Regulatory Board will be communicated in writing. It will also state the regulatory standard according to which the securities in question are to be listed or, as the case may be, the trading venue on which the securities in question are to be traded (Art. 3).

Art. 48
Preliminary decision

The applicant may request a preliminary decision from the Regulatory Board.

III. CONDITIONS FOR MAINTAINING LISTING

A. PERIODIC REPORTING

Art. 49
Annual reporting

[1] The issuer is required to publish an annual report. This comprises the audited annual financial statements, in accordance with the applicable financial reporting standard, as well as the corresponding audit report.

[2] The Regulatory Board may require that additional information be included in annual reporting, specifically details on the structure and function of corporate management and governance.

See also:

- Directive Financial Reporting (DFR)
- Directive Corporate Governance (DCG)

Art. 50
Interim reporting

[1] Issuers of listed equity securities are obliged to publish semi-annual financial statements.

[2] The publication of quarterly financial statements is voluntary. However, where quarterly financial statements are published, they must be drawn up according to the same principles as apply to semi-annual financial statements.

[3] There is no obligation to have interim financial statements audited or reviewed by an auditor.

See also:

- Directive Financial Reporting (DFR)
- Directive Regular Reporting Obligations (DRRO)

Art. 51
Financial reporting standards

Annual and interim financial statements must be drawn up in accordance with a financial reporting standard that is recognised by the Regulatory Board.

See also:

- Directive Financial Reporting (DFR)
- Directive Regular Reporting Obligations (DRRO)

B. FURTHER DUTIES TO PROVIDE INFORMATION

Art. 52
Corporate calendar

[1] Upon listing and continually at the beginning of each financial year, the issuer is obliged to produce a corporate calendar covering at least the current financial year, and to keep it up to date.

[2] The corporate calendar must give information on the dates in the issuer's year that are of major importance to investors, specifically the annual general meeting and the publication dates of the annual and interim financial statements and the corresponding reports.

[3] The issuer is obliged to notify SIX Exchange Regulation of the current URL (link) to the corporate calender on the issuer's website. SIX Exchange Regulation may publish this link electronically.

See also:

- Directive Regular Reporting Obligations (DRRO)

Art. 53
Obligation to disclose potentially price-sensitive facts

[1] The issuer must inform the market of any price-sensitive facts which have arisen in its sphere of activity. Price-sensitive facts are facts which are capable of triggering a significant change in market prices.

[2] The issuer must provide notification as soon as it becomes aware of the main points of the price-sensitive fact.

[3] Disclosure must be made so as to ensure the equal treatment of all market participants.

See also:

- Directive Ad hoc Publicity (DAH)

Art. 54
Postponement of disclosure

[1] The issuer may postpone the disclosure of a price-sensitive fact, if:

1. the fact is based on a plan or decision from the issuer; and
2. its dissemination might prejudice the legitimate interests of the issuer.

[2] The issuer must ensure that the price-relevant fact remains confidential for the entire time that disclosure is postponed. In the event of a leak, the market must be informed about the fact immediately, in accordance with the rules on disclosing price-sensitive information.

See also:

- Directive Ad hoc Publicity (DAH)

Art. 55
Notification of changes in the rights attached to securities

[1] The issuer must provide notification of each and every change in the rights attached to the listed securities, in good time prior to the entry into force of that change, so that investors' ability to exercise their rights is safeguarded.

[2] The issuer must notify SIX Exchange Regulation of such changes.

[3] In addition it must, by suitable means, draw the attention of investors to any planned changes in the rights attached to securities, so that investors may exercise their rights.

See also:

- Directive Regular Reporting Obligations (DRRO)

Art. 56
Disclosure of management transactions

[1] The disclosure of management transactions promotes the provision of information to investors, and contributes to the prevention and prosecution of market abuse.

[2] An issuer whose equity securities have their primary listing on SIX Swiss Exchange Ltd must ensure that the members of its board of directors and its executive committee report transactions in the issuer's equity securities, or in related financial instruments, to the issuer no later than the second trading day after the reportable transaction has been concluded. Transactions undertaken on a stock exchange must be reported to the issuer no later than the second trading day after they are executed.

[3] Transactions which have a direct or indirect effect on the assets of a person who is subject to the reporting obligation are subject to the reporting obligation. Transactions whose execution the person subject to the reporting obligation is unable to influence are not subject to the reporting obligation.
Transactions carried out by related parties must be reported if such transactions are carried out under the significant influence of a person who is subject to the reporting obligation.

[4] The notification to the issuer must contain the following information:

1. name of the person subject to the reporting obligation;
2. capacity of the person who is subject to the reporting obligation, as an executive member of the board of directors or member of the executive committee, or as a non-executive member of the board of directors;
3. in the case of reportable transactions carried out by related parties, information on whether the transaction was concluded by a natural person or a legal entity;
4. type of transaction;
5. type, total amount and ISIN of the equity securities and financial instruments or, if no ISIN exists, the principal terms of the financial instruments;
6. total value of transaction;
7. date of the transaction that is subject to the reporting obligation or, in the case of stock exchange trades, the date of execution;
8. date of the notification to the issuer from the person who is subject to the reporting obligation.

[5] The issuer must report the information listed under para. 4 to SIX Exchange Regulation within three trading days of receiving the notification itself. With the exception of para. 4 point 1 and point 8, this information will be published.

[6] SIX Exchange Regulation maintains a database of the notifications that it has received. The notifications that are published can be accessed by the public for a period of three years.

See also:

- Directive Management Transactions (DMT)

IV. SUSPENSION OF TRADING AND DELISTING

Art. 57
Suspension of trading

The SIX Exchange Regulation Division may temporarily suspend the trading of securities at the request of the issuer or on its own initiative if unusual circumstances, specifically the breach of important disclosure obligations by the issuer, indicate that such a suspension is advisable.

Art. 58
Delisting

[1] The Regulatory Board may cancel the listing of securities in the following cases:

1. following a justified application by an issuer, whereby the Regulatory Board must take into account the interests of stock exchange trading, investors and the issuer. The Regulatory Board may make delisiting conditional upon due notice and the observance of appropriate waiting periods. In any event, a duly signed declaration from the issuer must be submitted, stating that its responsible bodies agree to the delisting;
2. if the solvency of the issuer is in serious doubt, or insolvency or liquidation proceedings have already commenced, the securities will be delisted no later than the time at which their tradability is no longer guaranteed;
3. if the Regulatory Board deems that there is no longer a sufficiently liquid market in the securities;
4. if trading has been suspended for a continuous three-month period, and the reasons for the suspension continue to exist;
5. if the listing requirements set out in Art. 26 are no longer fulfilled.

[2] If the auditors do not fulfil the requirements set out in Art. 13, SIX Exchange Regulation will require the issuer to appoint, within a reasonable period, an audit firm that satisfies the provisions laid down in Art. 13. The period that has been granted may be extended for important reasons. If the issuer does not provide proof that the auditors are admitted as a state-supervised audit firm in accordance with Art. 7 or 8 AOA within the period granted, the Regulatory Board will instigate delisting proceedings.

[3] In its proceedings, the Regulatory Board will take into account any legal proceedings under federal law, in particular those pertaining to the Commercial Register Ordinance.

See also:

- Directive Delisting (DD)
- Federal Act of 16 December 2005 on the Admission and Oversight of Auditors (Audit Oversight Act, AOA) (in German)

V. SANCTIONS

Art. 59
Responsibility and procedure

Responsibility for instigating and conducting sanction proceedings is governed by the Rules of Procedure.

See also:

- Rules of Procedure (RP)

Art. 60
Breaches by issuers, guarantors or recognised representatives

Sanctions may be imposed in the event that an issuer, guarantor or recognised representative, as described in Art. 43, commits a breach of these Rules, the Additional Rules or their implementing provisions (specifically breaches of duties to cooperate and to provide or disclose information), or in the event that they do not ensure compliance with these rules and regulations.

Art. 61
Sanctions

[1] One or more of the following sanctions may be imposed on issuers, guarantors or recognised representatives. Where appropriate, these sanctions may be imposed cumulatively:

1. reprimand;
2. fine of up to CHF 1 million (in cases of negligence) or CHF 10 million (in cases of wrongful intent);
3. suspension of trading;
4. delisting or reallocation to a different regulatory standard;
5. exclusion from further listings;
6. withdrawal of recognition.

[2] In determining the sanction to be imposed, the competent body will take into consideration, in particular, the severity of the breach and the degree of fault. When setting the level of fines, the competent body will also take into account the impact of the sanction on the party concerned.

VI. APPEALS

Art. 62
Principle

[1] Appeals in the context of sanction proceedings are governed by the Rules of Procedure.

[2] Issuers and guarantors as defined in the Listing Rules may lodge an appeal against the decisions and preliminary decisions of the Regulatory Board to the Appeals Board within 20 trading days of their issue or publication, provided the issuer or guarantor has an interest worth of protection in having the decision amended. Appeals against the decisions of the Appeals Board may, in turn, be lodged with the SIX Swiss Exchange Board of Arbitration within 20 trading days.

[3] Shareholders may appeal to the Appeals Board against decisions on applications for delisting within 20 trading days of the publication of that decision on the SIX Exchange Regulation website, if they have an interest worthy of protection in having the decision amended. Shareholders may challenge the delisting decision only in respect of the period between the delisting announcement and the last day of trading. Such appeals may not subsequently be taken before the SIX Swiss Exchange Board of Arbitration.

[4] Shareholders are not entitled to appeal against decisions concerning the delisting of equity securities in accordance with Art. 58 para. 1 points 2 to 5 and para. 2, delistings ordered as sanctions, and delistings of collective investment schemes.

See also:

- Rules of Procedure (RP)
- Members of the Appeals Board
- Members of the Sanction Commission
- Rule Book of SIX Swiss Exchange

VII. FEES

Art. 63
Fees

[1] Fees, as set out in the List of Charges, are charged for listing securities and for maintaining listing, as well as for sanction and appeal proceedings.

[2] Should an issuer fail to pay the fees that are due for admission to trading, for listing or for maintaining listing, further applications for the admission to trading or listing of securities from the same issuer may be refused. Other issuers from the same group of companies may be obliged to make an advance payment corresponding to the probable costs before securities are admitted to trading or listed.

[3] SIX Exchange Regulation, the Regulatory Board and its Committees, the Sanctions Commission and the Appeals Board may demand an advance payment corresponding to the probable costs of their work.

[4] SIX Exchange Regulation, the Regulatory Board and its Committees, the Sanctions Commission, the Appeals Board and the Board of Arbitration may levy charges on an as-incurred basis for their work, provided such costs are not already covered by another tariff item in the List of Charges.

See also:

- List of Charges (LOC)

VIII. SPECIAL ADDITIONAL PROVISIONS

Art. 64
Principle

The provisions of this section apply in addition or as an alternative to Arts. 1 to 63 in the following specific special cases.

A. INVESTMENT COMPANIES

Art. 65
Definition

[1] In the context of the Listing Rules, investment companies are companies under the Swiss Code of Obligations, the sole purpose of which is to pursue collective investment schemes to generate income and/or capital gains, without engaging in any actual entrepreneurial activity as such.

[2] If the company comprises one or several companies owing to a majority vote or by other means, or undertakes direct or indirect investments under common management (as a member of a group), it does not fall within the scope of this definition.

[3] This definition also excludes collective investment schemes that hold a licence or authorisation under the Federal Collective Investment Schemes Act of 23 June 2006 (CISA).

See also:

- Federal Act of 23 June 2006 on Collective Investment Schemes (Collective Investment Schemes Act, CISA)

1. Listing requirements

Art. 66
Duration

Art. 11 is not applicable to investment companies.

See also:

- Directive Track Record (DTR)

Art. 67
Investment policy

[1] The principles of investment policy must be laid down in the articles of association, and the details must be included in a set of company regulations that may be obtained from anyone from the issuer or from an office in Switzerland designated in the listing prospectus and the "Official Notice".

[2] The Regulatory Board may require that a minimum level of investment is achieved by the time of the initial listing in cases where the principles of investment policy and the investment guidelines are formulated in open and imprecise terms.

Art. 68
Incorporation abroad

Investment companies which are incorporated abroad and which, under Swiss legislation on collective investment schemes, are not subject to authorisation in Switzerland, must prove that investors are able to exercise their participation and property rights to the same extent as would be possible under Swiss company law.

See also:

- Directive Foreign Companies (DFC)

2. Obligations with respect to listing

Art. 69
Content of the listing prospectus

The listing prospectus must contain the information prescribed in Scheme B. Scheme B constitutes an integral part of the Listing Rules.

See also:

- Scheme B

Art. 70
Information on risks

[1] The specific risks attached to investment companies must be mentioned in a prominent place in every publication that is in any way connected with listing (in particular the listing prospectus and the "Official Notice").

[2] In the case of investment companies, risks are defined specifically as those associated with the investment policy, the chosen investment instruments and investment techniques, as well as the uncertainties connected with the valuation of investments that are difficult to assess.

3. Conditions for maintaining listing

Art. 71
Annual reporting

The notes to the annual financial statements must contain certain additional information, as determined by the Regulatory Board. This information must be confirmed by the auditors.

See also:

- Directive Financial Reporting (DFR)
- Directive Regular Reporting Obligations (DRRO)

Art. 72
Interim reporting

The Regulatory Board disposes the content and intervals of the interim reports that must be produced.

See also:

- Directive Financial Reporting (DFR)
- Directive Regular Reporting Obligations (DRRO)

Art. 73
Publication of current value (net asset value)

The current value (net asset value) of securities must be published at regular intervals, but at least quarterly. The Regulatory Board may determine the frequency and type of publication in specific individual cases.

See also:

- Directive Regular Reporting Obligations (DRRO)
- Directive Ad hoc Publicity (DAH)

Art. 74
Valuation of investments that are difficult to assess

If an investment company invests to a considerable extent in investments which have only limited marketability (specifically those not listed on a secondary market with regular price determination mechanisms) or whose value is difficult to assess for other reasons, then special disclosure requirements, set by the Regulatory Board, must be observed.

See also:

- Directive Financial Reporting (DFR)
- Scheme B

Art. 75
Compliance with the investment policy

[1] The principles of the investment policy must be complied with at all times from listing onwards. These principles must be made available to investors upon request.

[2] If the issuer is a newly established company that is less than six months old, or if listing is used as a means of raising capital, then the company must comply with the principles of investment policy no later than three months following listing.

[3] If changes in the market mean that it is no longer possible to comply with the principles of investment policy, the investors must be informed of major deviations from the policy, as well as of the action that has been taken and of the period within which proper circumstances will be restored. The issuer must notify the market of the success of this action no later than at the end of the period mentioned.

See also:

- Directive Ad hoc Publicity (DAH)

Art. 76
Changes to investment policy and compensation model

[1] Should any changes be made to the principles of the investment policy and/or to the compensation model, SIX Exchange Regulation must be notified of the change in accordance with Art. 55 within five trading days of the corresponding resolution being passed by the responsible executive body of the issuer. Such changes must also be disclosed in the context of annual reporting.

[2] Compliance with new investment regulations must be assured no later than three months after their entry into force.

See also:

- Directive Regular Reporting Obligations (DRRO)
- Directive Ad hoc Publicity (DAH)

B. REAL ESTATE COMPANIES

Art. 77
Definition

[1] In the context of the Listing Rules, real estate companies are companies which continually draw at least two-thirds of their revenues from real estate-related activities, specifically from rental income, income from revaluations or sales, and from real estate services.

[2] If the criteria laid down in Art. 77 para. 1 can no longer be fulfilled for more than two consecutive financial years, the Regulatory Board may reallocate the issuer concerned to a different regulatory standard.

[3] Collective investment schemes that hold a licence or authorisation under CISA do not fall within the scope of this definition.

See also:

- Federal Act of 23 June 2006 on Collective Investment Schemes (Collective Investment Schemes Act, CISA)

1. Listing requirements

Art. 78
Duration

Art. 11 is not applicable to real estate companies.

See also:

- Directive Track Record (DTR)

Art. 79
Investment policy

[1] The principles of the investment policy must be laid down in the articles of association, and the details must be included in a set of company regulations that may be obtained by anyone from the issuer and from its website.

[2] The Regulatory Board may require that a minimum level of investment is achieved by the time of the initial listing in cases where the principles of investment policy and the investment guidelines are formulated in open and imprecise terms.

2. Obligations with respect to listing

Art. 80
Content of the listing prospectus

The listing prospectus must contain the information prescribed in Scheme C. Scheme C constitutes an integral part of the Listing Rules.

See also:

- Scheme C

3. Conditions for maintaining listing

Art. 81
Annual reporting

The notes to the annual financial statements must contain certain additional information, as determined by the Regulatory Board. Compliance must be confirmed by the auditors.

See also:

- Directive Financial Reporting (DFR)
- Scheme C
- Directive Regular Reporting Obligations (DRRO)

Art. 82
Interim reporting

The Regulatory Board will determine the content and intervals of the interim reports that must be produced.

See also:

- Directive Financial Reporting (DFR)
- Directive Regular Reporting Obligations (DRRO)

Art. 83
Compliance with the investment policy

[1] The principles of the investment policy must be complied with at all times from listing onwards. These principles must be made available to investors upon request.

[2] If the issuer is a newly established company that is less than six months old, or if listing is used as a means of raising capital, then the company must comply with the principles of investment policy no later than three months following listing.

[3] If changes in the market mean that it is no longer possible to comply with the principles of investment policy, the investors must be informed of major deviations from the policy, as well as of the action that has been taken and of the period within which proper circumstances will be restored. The issuer must notify the market of the success of this action no later than at the end of the period mentioned.

See also:

- Directive Ad hoc Publicity (DAH)

Art. 84
Changes to the investment policy and compensation model

[1] Should any changes be made to the principles of the investment policy and/or to the compensation model, SIX Exchange Regulation must be notified of the change in accordance with Art. 55 within five trading days of the corresponding resolution being passed by the responsible executive body of the issuer. Such changes must also be disclosed in the context of annual reporting.

[2] Compliance with new investment regulations must be assured no later than six months after their entry into force.

See also:

- Directive Regular Reporting Obligations (DRRO)
- Directive Ad hoc Publicity (DAH)

C. COMPANIES UNDER THE DOMESTIC STANDARD (CANCELLED)

1. Listing requirements (cancelled)

Art. 85
Duration (cancelled)

(cancelled)

Art. 86
Annual financial statements (cancelled)

(cancelled)

Art. 87
Capital resources (cancelled)

(cancelled)

Art. 88
Free float (cancelled)

(cancelled)

2. Obligations with respect to listing (cancelled)

Art. 89
Content of the listing prospectus (cancelled)

(cancelled)

D. GLOBAL DEPOSITORY RECEIPTS

Art. 90
Definitions

[1] In the context of the Listing Rules, global depository receipts (GDRs) are tradable certificates which are issued to represent deposited equity securities, and which permit the (indirect) exercise of the membership and property rights attached to the deposited equity securities.

[2] The deposited equity securities are referred to as "underlying shares".

[3] Unless stated otherwise, "issuer" refers to the issuer of the underlying shares.

[4] The issuer of the global depository receipts is referred to as the "depository".

1. Listing requirements

Art. 91
Requirements for the issuer

The requirements that must be fulfilled by the issuer of underlying shares are laid down in Arts. 10 to 16.

Art. 92
Requirements for the depository

[1] The depository must fulfil at least one of the following criteria:

1. the depository must be governed by the Banking Act (BA) or, if it is a securities dealer, by the Stock Exchange Act (SESTA);
2. the depository must be subject to equivalent foreign supervision.

[2] The Regulatory Board may require that suitable documents be presented as evidence of the depository's regulatory status.

See also:

- Federal Act of 8 November 1934 on Banks and Savings Banks (Banking Act, BA) (in German)
- Federal Act of 24 March 1995 on Stock Exchanges and Securities Trading (Stock Exchange Act, SESTA) (in German)
- Federal Act of 24 March 1995 on Stock Exchanges and Securities Trading (Stock Exchange Act, SESTA) (unofficial translation)

Art. 93
Underlying shares held on a fiduciary basis

The depository agreement must provide for the underlying shares to be held by the depository on a fiduciary basis (or on the basis of similar arrangements under applicable law) on behalf of the investors with rights to the global depository receipts in question, and for the depository to exercise all property and membership rights attached to the underlying shares in the interests of those investors.

Art. 94
Requirements for global depository receipts

[1] Arts. 17 to 26 apply mutatis mutandis to global depository receipts.

[2] The free float requirements under Art. 19 refer to the individual categories of the global depository receipts to be listed.

See also:

- Directive Distribution Equity Securities (DDES)

2. Obligations with respect to listing

Art. 95
Content of the listing prospectus

The listing prospectus must contain the information prescribed in Scheme D for global depository receipts. Scheme D constitutes an integral part of the Listing Rules.

See also:

- Scheme D

Art. 96
Abridgement of the listing prospectus

In derogation of Art. 34, the listing prospectus may be abridged in the following cases:

1. if global depository receipts in respect of the same underlying shares are already listed on SIX Swiss Exchange, and the new global depository receipts are offered to the holders of the global depository receipts already listed on the basis of ordinary or preferential subscription rights, either free of charge or against payment;
2. in relation to the listing of options issued to the holders of the global depository receipts and of convertible bonds or bonds with warrants, where such option or conversion rights relate to global depository receipts that are already listed on SIX Swiss Exchange in respect of the issuer's underlying shares.

Art. 97
Listing notice (cancelled)

(cancelled)

Art. 98
Issuer declaration

In connection with the listing of global depository receipts, the issuer of the underlying shares must also issue a declaration, as described in Art. 45.

See also:

- Declaration of Consent

3. Conditions for maintaining listing

Art. 99
Principle

The issuer is responsible for ensuring that the information obligations attached to continued listing are fulfilled.

Art. 100
Management transactions

Management transactions need not be disclosed as set out in Art. 56.

Art. 101
Information on corporate governance

The Directive on Information Relating to Corporate Governance is not applicable.

Art. 102
Interim reporting

It is not necessary to publish interim financial statements.

Art. 103
Ongoing reporting obligations

For the issuers of global depository receipts and underlying shares, the obligations to provide information during listing are laid down, mutatis mutandis, in Chapter III ("Conditions for maintaining listing"), provided they have not been amended by this Chapter VIII.D.

See also:

- Directive Regular Reporting Obligations (DRRO)

Art. 104
Changes to depository and depository agreement

Changes concerning the depository or depository agreement must be reported to SIX Exchange Regulation at the same time as the holders of the global depository receipts themselves are informed.

See also:

- Directive Regular Reporting Obligations (DRRO)

E. COLLECTIVE INVESTMENT SCHEMES

Art. 105
Definition

In the context of the Listing Rules, collective investment schemes refers to units (or shares) in Swiss and foreign collective investment schemes that, in accordance with CISA, are subject to the supervision of FINMA or that require a license from FINMA to be sold in or from Switzerland.

See also:

- Federal Act of 23 June 2006 on Collective Investment Schemes (Collective Investment Schemes Act, CISA)

Art. 106
Implementing provisions

SIX Swiss Exchange may issue implementing trading provisions for certain types of collective investment schemes, such as real estate funds and exchange-traded funds.

1. Listing requirements

Art. 107
Duration

Art. 11 is not applicable to collective investment schemes.

Art. 108
Minimum capitalisation/ free float of units

[1] In addition to the requirement laid down in Art. 19, collective investment schemes must have assets of at least CHF 100 million at the time of listing.

[2] These requirements are waived if a SIX Swiss Exchange participant undertakes to SIX Swiss Exchange to act as a market maker for the securities in question.

[3] SIX Swiss Exchange may include implementing provisions regarding market making in its Rule Book or in the applicable SIX Swiss Exchange directive, if any.

See also:

- Rule Book of SIX Swiss Exchange

Art. 109
FINMA ruling

The listing of units in collective investment schemes is conditional upon:

1. Swiss collective investment schemes:
   authorisation from FINMA, in accordance with the CISA, and fulfilment of the special listing requirements set out below;
2. foreign collective investment schemes:
   authorisation for sale in or from Switzerland and fulfilment of the special listing requirements set out below.

See also:

- Federal Act of 23 June 2006 on Collective Investment Schemes (Collective Investment Schemes Act, CISA)

2. Obligations with respect to listing

Art. 110
Listing prospectus

[1] With respect to listing, the latest version of the prospectus submitted to FINMA as part of the authorisation process for the collective investment scheme pursuant to the Federal Collective Investment Schemes Act (CISA) is to be submitted as the listing prospectus as defined in Art. 27.

[2] (cancelled)

[3] (cancelled)

Art. 111
Issuer declaration

[1] Further to Art. 45, the issuer of a collective investment scheme must submit with its application a declaration that it consents to electronic publication of the information that must be reported in accordance with Art. 55.

[2] In the case of foreign collective investment schemes that require a licence to be sold in or from Switzerland, the declaration required under Art. 45 must be made by the issuer or by its representative in Switzerland, as per Arts. 123 et seq. CISA.

See also:

- Federal Act of 23 June 2006 on Collective Investment Schemes (Collective Investment Schemes Act, CISA) (in German)

Art. 112
Listing notice (cancelled)

(cancelled)

3. Conditions for maintaining listing

Art. 113
Annual and interim reporting

The content of the annual and semi-annual reports that must be submitted is governed by the special legal provisions that apply to collective investment schemes.

Art. 113a
Management transactions

Transactions involving holdings in investment companies with variable capital (SICAV) pursuant to the Federal Collective Investment Schemes Act (CISA) are not subject to the reporting obligation laid down in Art. 56.

IX. FINAL PROVISIONS

A. ENTRY INTO FORCE

Art. 114
Entry into force

The Listing Rules were approved by FINMA on 23 April 2009 and enter into force on 1 July 2009. They replace the past Listing Rules issued by SIX Swiss Exchange, as well as the Additional Rules for the Listing of Investment Companies, of 1 November 2006, the Additional Rules for the Listing of Real Estate Companies, of 18 December 2000, the Additional Rules for Listing in the Segment "SWX Local Caps", of 29 March 2006, the Additional Rules for the Listing of Global Depository Receipts, of 14 December 2006, and the Additional Rules for the Listing of Collective Investment Schemes, of 1 November 2006.

B. TRANSITIONAL PROVISIONS

Art. 115
Securities that are already listed

[1] Securities that are already listed on SIX Swiss Exchange remain listed.

[2] Unless stated otherwise in these transitional provisions, all of the provisions of these Listing Rules apply from their entry into force also to the issuers of securities that are already listed.

Art. 116
Pending listing and sanction proceedings

[1] Proceedings that are currently ongoing will be handled in accordance with the old provisions.

[2] Sanction proceedings that do not begin until after these Listing Rules have entered into force will also be handled in accordance with the old provisions, provided the acts or omissions on which they rest took place under the old law.

Art. 117
Periodic reporting

Issuers of securities that are already listed must publish interim and annual financial statements in accordance with Art. 49 for the first time in respect of the financial year that begins on or after 1 July 2009.

C. REVISION

Art. 118
Revisions

[1] The revision of Arts. 45 and 108 that was decreed by the Regulatory Board in its resolution of 21 April 2010 and approved by the Swiss Financial Market Supervisory Authority on 26 April 2010 enters into force on 1 May 2010.

[2] The revision of Art. 2 that was decreed by the Regulatory Board in its resolution of 1 October 2010 and approved by the Swiss Financial Market Supervisory Authority on 7 October 2010 enters into force on 15 October 2010.

[3] The revision of Art. 56 that was decreed by the Regulatory Board in its resolution of 12 November 2010 and approved by the Swiss Financial Market Supervisory Authority on 22 November 2010 enters into force on 1 April 2011.

[4] The revision of Arts. 21, 24, 29, 30, 31, 35, 36, 45, 50, 52, 55, 58, 62, 63, 67, 70, 76, 84, 109 and 116, the cancellation of Arts. 37 to 40, 97 and 112 and the enactment of Arts. 40a, 40b and 113a that were decreed by the Regulatory Board in its resolution of 4 April 2013 and approved by the Swiss Financial Market Supervisory Authority on 23 December 2013 enter into force on 1 March 2014.

[5] The revision of Arts. 3, 15 and 19, the cancellation of Arts. 85 to 89, and the enactment of Art. 9a that were decreed by the Regulatory Board in its resolution of 6 May 2015 and approved by the Swiss Financial Market Supervisory Authority on 9 June 2015 enter into force on 1 August 2015.

[6] Amendments due to the entry into force of the Financial Market Infrastructure Act and related ordinances in Art. 3 and Art. 47 as of 1 April 2016.

[7] The revision of Art. 110 and the enactment of Art. 8a that were decreed by the Regulatory Board in its resolution of 4 November 2016 and approved by the Swiss Financial Market Supervisory Authority on 20 January 2017 enter into force on 1 May 2017.

EXHIBIT 2

Finance Report 2016

Cash inflow (outflow) from equity compensation plans in millions of CHF

	2016	2015
Roche Option Plan exercises	16	41
Chugai and Foundation Medicine plans' exercises	7	14
Roche Connect costs	(20)	(16)
Transactions in own equity	(560)	(208)
Total cash inflow (outflow) from equity-settled equity compensation plans, net of transactions in own equity	**(557)**	**(169)**

The net cash outflow from transactions in own equity mainly arises from sales and purchases of equity instruments which are held for the Group's potential conversion obligations that may arise from the Group's equity compensation plans (see Note 21).

Equity compensation plans

Roche Stock-settled Stock Appreciation Rights. The Group issues Stock-settled Stock Appreciation Rights (S-SARs) to certain directors, management and employees selected at the discretion of the Group. The S-SARs give employees the right to receive non-voting equity securities reflecting the value of any appreciation in the market price of the non-voting equity securities between the grant date and the exercise date. Under the Roche S-SAR Plan 180 million S-SARs will be available for issuance over a ten-year period. The rights, which are non-tradable equity-settled awards, have a seven-year duration and vest on a phased basis over three years.

Roche S-SARs – movement in number of rights outstanding

	2016 Number of rights (thousands)	2016 Weighted average exercise price (CHF)	2015 Number of rights (thousands)	2015 Weighted average exercise price (CHF)
Outstanding at 1 January	35,814	206.02	34,909	187.72
Granted	11,356	250.82	8,471	256.75
Forfeited	(1,122)	253.57	(995)	244.22
Exercised	(3,829)	169.02	(6,531)	168.26
Expired	(41)	160.35	(40)	194.50
Outstanding at 31 December	**42,178**	**220.22**	**35,814**	**206.02**
– of which exercisable	24,074	194.87	20,887	173.68

Roche S-SARs – terms of rights outstanding at 31 December 2016

Year of grant	Number outstanding (thousands)	Weighted average years remaining contractual life	Rights outstanding Weighted average exercise price (CHF)	Number exercisable (thousands)	Rights exercisable Weighted average exercise price (CHF)
2010	1,870	0.74	147.72	1,870	147.72
2011	3,260	1.18	140.19	3,260	140.19
2012	7,084	2.26	157.94	7,084	157.94
2013	5,507	3.26	214.79	5,507	214.79
2014	5,878	4.26	263.47	3,787	263.48
2015	7,588	5.27	256.75	2,514	256.77
2016	10,991	6.26	250.81	52	251.50
Total	**42,178**	**4.10**	**220.22**	**24,074**	**194.87**

Roche Restricted Stock Unit Plan. The Group issues Restricted Stock Units (RSUs) awards to certain directors, management and employees selected at the discretion of the Group. The RSUs, which are non-tradable, represent the right to receive non-voting equity securities which vest only after a three-year period, subject to performance conditions, if any. There are currently no performance conditions on outstanding RSUs at 31 December 2016. Under the Roche RSU Plan 20 million non-voting equity securities will be available for issuance over a ten-year period. The Roche RSU Plan also includes a value adjustment which will be an amount equivalent to the sum of shareholder distributions made by the Group during the vesting period attributable to the number of non-voting equity securities for which an individual award has been granted.

Roche RSUs – movement in number of awards outstanding

	2016 Number of awards (thousands)	2015 Number of awards (thousands)
Outstanding at 1 January	1,952	1,392
Granted	1,308	778
Forfeited	(127)	(136)
Transferred to participants	(790)	(82)
Outstanding at 31 December	**2,343**	**1,952**
– of which vested and transferable	–	–

Roche Performance Share Plan. The Group offers future share and non-voting equity security awards (or, at the discretion of the Board of Directors, their cash equivalent) to certain directors and key senior managers. These are non-tradable equity-settled awards. The programme currently operates in annual three-year cycles. The Roche Performance Share Plan (PSP) includes a value adjustment which will be an amount equivalent to the sum of shareholder distributions made by the Group during the vesting period attributable to the number of shares or non-voting equity securities for which an individual award has been granted. The amount of shares or non-voting equity securities allocated will depend upon the individual's salary level, the achievement of performance targets linked to the Group's Total Shareholder Return (shares and non-voting equity securities combined) relative to the Group's peers during the three-year period from the date of the grant, and the discretion of the Board of Directors. Each award will result in between zero and two shares or non-voting equity securities (before value adjustment), depending upon the achievement of the performance targets.

Roche Performance Share Plan – terms of outstanding awards at 31 December 2016

	2014–2016	2015–2017	2016–2018
Number of awards outstanding (thousands)	69	69	41
Vesting period	3 years	3 years	3 years
Allocated to recipients in	Feb. 2017	Feb. 2018	Feb. 2019
Fair value per unit at grant (CHF)	228.42	217.45	264.36
Total fair value at grant (CHF millions)	**18**	**17**	**11**

Roche Connect. This programme enables all employees worldwide, except for those in the US and certain other countries, to make regular deductions from their salaries to purchase non-voting equity securities. It is administered by independent third parties. The Group contributes to the programme, which allows the employees to purchase non-voting equity securities at a discount (usually 20%). The administrator purchases the necessary non-voting equity securities directly from the market. At 31 December 2016 the administrator held 2.6 million non-voting equity securities (2015: 2.3 million). In 2016 the cost of the plan was CHF 20 million (2015: CHF 16 million).

Roche Option Plan. This programme is used in countries where S-SARs are not used. Awards under this plan give employees the right to purchase non-voting equity securities at an exercise price specified at the grant date. The options, which are non-tradable equity-settled awards, have a seven-year duration and vest on a phased basis over three years.

Roche Option Plan – movement in number of options outstanding

	2016 Number of options (thousands)	2016 Weighted average exercise price (CHF)	2015 Number of options (thousands)	2015 Weighted average exercise price (CHF)
Outstanding at 1 January	794	203.49	895	184.62
Granted	160	250.44	185	256.61
Forfeited	(20)	250.14	(39)	236.96
Exercised	(100)	164.90	(244)	169.43
Expired	–	–	(3)	195.80
Outstanding at 31 December	**834**	**216.02**	**794**	**203.49**
– of which exercisable	537	194.88	486	173.87

Controlling shareholders

At 31 December 2016 and 2015, based on information supplied to the Group, a shareholder group with pooled voting rights owned 72,018,000 shares, which represented 45.01% of the issued shares. This group consisted of Ms Vera Michalski-Hoffmann, Ms Maja Hoffmann, Mr André Hoffmann, Dr Andreas Oeri, Ms Sabine Duschmalé-Oeri, Ms Catherine Oeri, Mr Jörg Duschmalé, Mr Lukas Duschmalé and the charitable foundation Wolf. The shareholder pooling agreement has existed since 1948. The figures above do not include any shares without pooled voting rights that are held outside this group by individual members of the group. Ms Maja Oeri, formerly a member of the pool, now holds 8,091,900 shares representing 5.057% of the voting rights independently of the pool.

At 31 December 2016, based on information supplied to the Group, 53,332,863 shares (2015: 53,332,863 shares) are owned by Novartis Holding AG, Basel (participation below 33⅓%).

5. Full-time equivalents

The annual average number of full-time equivalents for 2016 and 2015 did not exceed ten people.

6. Board and Executive shareholdings

Board of Directors

Directors Mr André Hoffmann and Dr Andreas Oeri and certain other members of the founder's families who are closely associated with them belong to a shareholder group with pooled voting rights. At the end of 2016 and 2015 this group held 72,018,000 shares (45.01% of issued shares). Detailed information about this group is given in Note 4. In addition, at the end of the year the members of the Board of Directors and persons closely associated with them held shares and non-voting equity securities *(Genussscheine)* as shown in the table below.

At the Annual General Meeting on 14 March 2017, Prof. Pius Baschera will not stand for re-election. Mrs Anita Hauser will be nominated for election as a new member of the Board of Directors.

Shareholdings of members of the Board of Directors

	Shares		Non-voting equity securities *(Genussscheine)*		
	2016	2015	2016	2015	Other
Ch. Franz	7,639	3,663	4,810	350	
A. Hoffmann	–[a]	–[a]	200	200	
P. Baschera	1	1	4,600	4,600	
J. Bell	300	300	1,647	1,647	
J. Brown	–	n/a	–	n/a	
P. Bulcke	–	–	2,500	2,500	
D. Julius	n/a	350	n/a	2,050	
R.P. Lifton	–	–	–	–	
A. Oeri	–[a]	–[a]	187,793	187,793	
B. Poussot	–	–	–	–	
S. Schwan	–	–	–	–	[b]
C. Süssmuth Dyckerhoff	–	n/a	621[c]	n/a	[c]
P.R. Voser	–	–	5,000	3,600	
B. Weder di Mauro	n/a	200	n/a	800	
Total	**7,940**	**4,514**	**207,171**	**203,540**	

a) Does not include shares held in the shareholder group with pooled voting rights.
b) As a member of the Corporate Executive Committee, Dr Schwan's shareholdings are disclosed in the tables below.
c) Jointly held with close relative.

Corporate Executive Committee

Members of the Corporate Executive Committee and persons closely associated with them held shares and non-voting equity securities as shown in the table below.

Shareholdings of members of the Corporate Executive Committee

	Shares		Non-voting equity securities *(Genussscheine)*		
	2016	2015	2016	2015	Other
S. Schwan	138,011	115,745	29,836	16,179	[a]
S. Ayyoubi	n/a	12,622	n/a	13,223	[a]
R. Diggelmann	–	–	5,776	870	[a]
A. Hippe	6,970	6,970	13,305	9,370	[a]
G.A. Keller	19,191	19,192	18,277	12,897	[a], [b]
D. O'Day	3,065	3,065	12,896	8,143	[a]
C.A. Wilbur	–	n/a	1,714	n/a	[a]
Total	**167,237**	**157,594**	**81,804**	**60,682**	

a) Equity compensation awards: S-SARs, RSUs and Roche Performance Share Plan.
b) Close relatives of Dr Keller held 1,100 Roche shares (2015: 1,100 Roche shares).

At 31 December 2016 members of the Corporate Executive Committee held Stock-settled Stock Appreciation Rights (S-SARs) as shown in the table below. The terms and vesting conditions of these awards are disclosed in Note 26 to the Roche Group Annual Financial Statements and additional supplementary information is in the Remuneration Report included in the Annual Report on pages 124 to 150.

S-SARs awards held at 31 December 2016

Year of issue	2016	2015	2014	2013	2012	2011	2010	Total
S. Schwan	89,517	59,997	54,453	71,472	–	–	–	275,439
R. Diggelmann	29,100	18,006	16,338	17,874	15,000	12,732	–	109,050
A. Hippe	35,811	24,003	21,783	28,590	–	–	–	110,187
G.A. Keller	33,570	22,503	20,424	26,805	15,000	–	–	118,302
D. O'Day	55,950	30,000	27,231	35,739	–	–	–	148,920
C.A. Wilbur	15,339	4,164	5,754	4,594	2,122	–	–	31,973
Total CEC	**259,287**	**158,673**	**145,983**	**185,074**	**32,122**	**12,732**	**–**	**793,871**
Strike price (CHF)	251.50	256.10	263.20	214.00	157.50	140.10	175.50	
Expiry date	Mar. 2023	Mar. 2022	Mar. 2021	Mar. 2020	Mar. 2019	Feb. 2018	Feb. 2017	

At 31 December 2016 members of the Corporate Executive Committee held Restricted Stock Units (RSUs) as shown in the table below. The terms and vesting conditions of these awards are disclosed in Note 26 to the Roche Group Annual Financial Statements and additional supplementary information is in the Remuneration Report included in the Annual Report on pages 124 to 150. In 2016, RSUs as remuneration component for the Corporate Executive Committee were replaced by awarding of corresponding Performance Share Plan (PSP) awards. RSU awards will be vested to the recipient after three years only. Thereafter, the non-voting equity securities may remain blocked for up to ten years.

RSU awards held at 31 December 2016

Year of issue	2016	2015	2014	Total
S. Schwan	n/a	5,466	5,551	11,017
R. Diggelmann	n/a	1,639	1,665	3,304
A. Hippe	n/a	2,186	2,220	4,406
G.A. Keller	n/a	2,049	2,081	4,130
D. O'Day	n/a	2,733	2,775	5,508
C.A. Wilbur	n/a	379	1,691	2,070
Total CEC	**n/a**	**14,452**	**15,983**	**30,435**

EXHIBIT 3

Finance Report 2017

Controlling shareholders

At 31 December 2017 and 2016, based on information supplied to the Group, a shareholder group with pooled voting rights owned 72,018,000 shares, which represented 45.01% of the issued shares. This group consisted of Ms Vera Michalski-Hoffmann, Ms Maja Hoffmann, Mr André Hoffmann, Dr Andreas Oeri, Ms Sabine Duschmalé-Oeri, Ms Catherine Oeri, Dr Jörg Duschmalé, Mr Lukas Duschmalé and the charitable foundation Wolf. The shareholder pooling agreement has existed since 1948. The figures above do not include any shares without pooled voting rights that are held outside this group by individual members of the group. Ms Maja Oeri, formerly a member of the pool, now holds 8,091,900 shares representing 5.057% of the voting rights independently of the pool.

At 31 December 2017, based on information supplied to the Group, 53,332,863 shares (2016: 53,332,863 shares) are owned by Novartis Holding AG, Basel (participation below 33⅓%).

5. Full-time equivalent employees

The annual average number of full-time equivalent employees for 2017 and 2016 did not exceed ten people.

6. Board and Executive shareholdings

Board of Directors

Directors Mr André Hoffmann and Dr Andreas Oeri and certain other members of the founder's families who are closely associated with them belong to a shareholder group with pooled voting rights. At the end of 2017 and 2016 this group held 72,018,000 shares (45.01% of issued shares). Detailed information about this group is given in Note 4. In addition, at the end of the year the members of the Board of Directors and persons closely associated with them held shares and non-voting equity securities *(Genussscheine)* as shown in the table below.

Shareholdings of members of the Board of Directors

	Shares		Non-voting equity securities *(Genussscheine)*		
	2017	2016	2017	2016	Other
Ch. Franz	11,522	7,639	4,810	4,810	
A. Hoffmann	–[a]	–[a]	200	200	
P. Baschera	n/a	1	n/a	4,600	
J. Bell	1,115	300	1,647	1,647	
J. Brown	729	–	–	–	
P. Bulcke	–	–	4,000	2,500	
A. Hauser	–	n/a	150	n/a	[d]
R.P. Lifton	–	–	–	–	[e]
A. Oeri	–[a]	–[a]	187,793	187,793	
B. Poussot	500	–	500	–	
S. Schwan	–	–	–	–	[b]
C. Suessmuth Dyckerhoff	–	–	621[c]	621[c]	
P.R. Voser	–	–	5,000	5,000	
Total	**13,866**	**7,940**	**204,721**	**207,171**	

a) Does not include shares held in the shareholder group with pooled voting rights.
b) As a member of the Corporate Executive Committee, Dr Schwan's shareholdings are disclosed in the tables below.
c) Jointly held with close relative.
d) Close relatives of A. Hauser held 20 non-voting equity securities *(Genussscheine)* (2016: n/a).
e) R.P. Lifton held 300 Roche American Depositary Receipts (ADRs) (2016: none). Eight ADRs are equivalent to one non-voting equity security *(Genussschein)*. ADRs have been traded in the US over-the-counter market since July 1992.

Corporate Executive Committee

Members of the Corporate Executive Committee and persons closely associated with them held shares and non-voting equity securities as shown in the table below.

Shareholdings of members of the Corporate Executive Committee

	Shares		Non-voting equity securities *(Genussscheine)*		
	2017	2016	2017	2016	Other
S. Schwan	153,428	138,011	27,040	29,836	a)
R. Diggelmann	–	–	8,058	5,776	a)
A. Hippe	6,970	6,970	16,585	13,305	a)
G.A. Keller	19,191	19,191	18,445	18,277	a), b)
D. O'Day	3,065	3,065	16,091	12,896	a)
C.A. Wilbur	–	–	3,141	1,714	a)
Total	**182,654**	**167,237**	**89,360**	**81,804**	

a) Equity compensation awards: S-SARs, RSUs and Roche Performance Share Plan.
b) Close relatives of Dr Keller held 1,100 Roche shares (2016: 1,100 Roche shares).

At 31 December 2017 members of the Corporate Executive Committee held Stock-settled Stock Appreciation Rights (S-SARs) as shown in the table below. The terms and vesting conditions of these awards are disclosed in Note 26 to the Roche Group Annual Financial Statements and additional supplementary information is in the Remuneration Report included in the Annual Report on pages 120 to 146.

S-SARs awards held at 31 December 2017

Year of issue	2017	2016	2015	2014	2013	2012	2011	Total
S. Schwan	85,476	89,517	59,997	54,453	30,000	–	–	319,443
R. Diggelmann	27,786	29,100	18,006	16,338	17,874	15,000	12,732	136,836
A. Hippe	34,191	35,811	24,003	21,783	–	–	–	115,788
G.A. Keller	32,052	33,570	22,503	20,424	–	–	–	108,549
D. O'Day	53,424	55,950	30,000	27,231	–	–	–	166,605
C.A. Wilbur	16,032	15,339	4,164	5,754	4,594	2,122	–	48,005
Total CEC	**248,961**	**259,287**	**158,673**	**145,983**	**52,468**	**17,122**	**12,732**	**895,226**
Strike price (CHF)	251.90	251.50	256.10	263.20	214.00	157.50	140.10	
Expiry date	Mar. 2024	Mar. 2023	Mar. 2022	Mar. 2021	Mar. 2020	Mar. 2019	Feb. 2018	

At 31 December 2017 members of the Corporate Executive Committee held Restricted Stock Units (RSUs) as shown in the table below. The terms and vesting conditions of these awards are disclosed in Note 26 to the Roche Group Annual Financial Statements and additional supplementary information is in the Remuneration Report included in the Annual Report on pages 120 to 146. In 2016, RSUs as remuneration component for the Corporate Executive Committee were replaced by awarding of corresponding Performance Share Plan (PSP) awards. RSU awards will be vested to the recipient after three years only. Thereafter, the non-voting equity securities may remain blocked for up to ten years.

RSU awards held at 31 December 2017

Year of issue	2017	2016	2015	Total
S. Schwan	n/a	n/a	5,466	5,466
R. Diggelmann	n/a	n/a	1,639	1,639
A. Hippe	n/a	n/a	2,186	2,186
G.A. Keller	n/a	n/a	2,049	2,049
D. O'Day	n/a	n/a	2,733	2,733
C.A. Wilbur	n/a	n/a	379	379
Total CEC	**n/a**	**n/a**	**14,452**	**14,452**

EXHIBIT 4

Exchange Regulation

Management transactions

Published notifications of management transactions of SIX Swiss Exchange–listed companies.

Issuer	**Roche Holding AG**
Date	03.03.2017
Transaction executed by	an executive member of the board of directors / member of the executive committee
Type of transaction	**Sale**
Type of rights	Other securities
Total amount of rights	5'983
Transaction Value	CHF **1'567'546.00**
ISIN	CH0012032048
Principal terms of the financial instruments	Exersale
Further transaction details	Exersale of 15'000 ROG-S-SARs (Stock-settled Stock Appreciation Rights), March 2012 (strike price: CHF 157.50, expiry date: 8. March 2019) i.e. sale of 5'983 resulting ROG (sale price CHF 262.00 per ROG)

Exchange Regulation

Management transactions

Published notifications of management transactions of SIX Swiss Exchange–listed companies.

Searchable data relating to management transactions is submitted to SIX Swiss Exchange by listed issuers. SIX Swiss Exchange assumes no liability for the completeness, accuracy or up-to-date nature of the data. Please read our legal notice (disclaimer).

Issuer	**Roche Holding AG**
Date	03.05.2017
Transaction executed by	an executive member of the board of directors / member of the executive committee
Type of transaction	**Sale**
Type of rights	Other securities
Total amount of rights	5'476
Transaction Value	CHF **1'448'679.40**
ISIN	CH0012032048
Principal terms of the financial instruments	Exersale ROG
Further transaction details	Exersale of 28'590 Roche Stock-settled Stock Appreciation Rights (S-SARs), March 2013, strike price CHF 214.00, Expiry date: 7. March 2020, i.e. sale of 5'476 resulting ROG (sale price CHF 264.550657 per ROG)

Exchange Regulation

Management transactions

Published notifications of management transactions of SIX Swiss Exchange–listed companies.

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Issuer	**Roche Holding AG**
Date	03.05.2017
Transaction executed by	an executive member of the board of directors / member of the executive committee
Type of transaction	**Sale**
Type of rights	Other securities
Total amount of rights	6'834
Transaction Value	CHF **1'808'310.80**
ISIN	CH0012032048
Principal terms of the financial instruments	Exersale ROG
Further transaction details	Exersale of 35'739 Roche Stock-settled Stock Appreciation Rights (S-SARs), March 2013, strike price CHF 214.00, Expiry date: 7. March 2020, i.e. sale of 6'834 resulting ROG (sale price CHF 264.605034 per ROG)

Exchange Regulation

Management transactions

Published notifications of management transactions of SIX Swiss Exchange–listed companies.

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Issuer	**Roche Holding AG**
Date	10.05.2017
Transaction executed by	an executive member of the board of directors / member of the executive committee
Type of transaction	**Sale**
Type of rights	Other securities
Total amount of rights	8'190
Transaction Value	CHF **2'186'691.30**
ISIN	CH0012032048
Principal terms of the financial instruments	Exersale ROG
Further transaction details	Exersale of 41'472 Roche Stock-settled Stock Appreciation Rights (S-SARs), March 2013, strike price CHF 214.00, Expiry date: 7. March 2020, i.e. sale of 8'190 resulting ROG (sale price CHF 266.995275 per ROG)

EXHIBIT 5

Exchange Regulation

Management transactions

Published notifications of management transactions of SIX Swiss Exchange–listed companies.

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Issuer	**Roche Holding AG**
Date	29.03.2017
Transaction executed by	an executive member of the board of directors / member of the executive committee
Type of transaction	**Sale**
Type of rights	Other Securities
Total amount of rights	2'673
Transaction Value	CHF **684'288.00**
ISIN	CH0012032048
Principal terms of the financial instruments	ROG

Exchange Regulation

Management transactions

Published notifications of management transactions of SIX Swiss Exchange–listed companies.

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Issuer	**Roche Holding AG**
Date	30.03.2017
Transaction executed by	an executive member of the board of directors / member of the executive committee
Type of transaction	**Sale**
Type of rights	Other securities
Total amount of rights	4'514
Transaction Value	CHF **1'164'612.00**
ISIN	CH0012032048
Principal terms of the financial instruments	ROG

SIX Exchange Regulation

Management transactions

Published notifications of management transactions of SIX Swiss Exchange–listed companies.

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Issuer	**Roche Holding AG**
Date	02.05.2017
Transaction executed by	an executive member of the board of directors / member of the executive committee
Type of transaction	**Sale**
Type of rights	Bearer Shares
Total amount of rights	1'249
Transaction Value	CHF **328'174.75**
ISIN	CH0012032113
Principal terms of the financial instruments	RO

Exchange Regulation

Management transactions

Published notifications of management transactions of SIX Swiss Exchange–listed companies.

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Issuer	**Roche Holding AG**
Date	02.05.2017
Transaction executed by	an executive member of the board of directors / member of the executive committee
Type of transaction	**Sale**
Type of rights	Other securities
Total amount of rights	10'876
Transaction Value	CHF **2'849'012.00**
ISIN	CH0012032048
Principal terms of the financial instruments	ROG

Exchange Regulation

Management transactions

Published notifications of management transactions of SIX Swiss Exchange–listed companies.

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Issuer	**Roche Holding AG**
Date	03.05.2017
Transaction executed by	an executive member of the board of directors / member of the executive committee
Type of transaction	**Sale**
Type of rights	Bearer Shares
Total amount of rights	9
Transaction Value	CHF **2'385.00**
ISIN	CH0012032113
Principal terms of the financial instruments	RO

SIX Exchange Regulation

Management transactions

Published notifications of management transactions of SIX Swiss Exchange–listed companies.

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Back to the results

Issuer	**Roche Holding AG**
Date	10.05.2017
Transaction executed by	an executive member of the board of directors / member of the executive committee
Type of transaction	**Sale**
Type of rights	Bearer Shares
Total amount of rights	2'742
Transaction Value	CHF **730'057.50**
ISIN	CH0012032113
Principal terms of the financial instruments	RO